

**BADGER STATE**

# Smoke Signals

**For Radio Amateurs • By Radio Amateurs**

**Published Monthly Since 1969 • Our 22nd Year • Single Copy: \$1.25**

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**Vol. 22 No. 7 - 259th Consecutive Monthly Issue - Baraboo, Wisconsin - July 1991**

## Wisconsin Rapids Radio Amateur Achieves Scouting's Highest Rank

16-year-old Scott Santoski, KB9DVS, of Wisconsin Rapids, in the photo at right, was recently elevated at a ceremony to the rank of Eagle Scout. Read more about Scott's many achievements in Scouting in a story on page 6 of this issue. The photo was taken by Scott's father, Gene Santoski, K9UTQ.



## League Seeks Access to 216-220 MHz

**Says Space Needed for Packet  
Links; Sharing Plan Possible**

*See Story on Page 12*

## H.R. 73 Gains a Few More Co-Sponsors

Four more congresspeople have become co-sponsors of H.R. 73, introduced in the U.S. House of Representatives on Jan 2, 1991. They are Jack Reed (D-RI); Jill Long (D-IN); Wayne Gilchrest (R-MD); and Claude Harris (D-AL).

This brings the number of co-sponsors of the bill to 104, less than one-fourth of the total House membership. Many more are needed if the bill is to be ensured of coming up for a vote this session. Please see March *QST*, page 41, for how you can help!

- *The ARRL Letter*, May 13, 1991

So far as is known at BSSS press time, the number of Wisconsin Representatives who have signed as co-sponsors of H.R. 73 remains at two, out of a total of nine.

- BSSS Ed.

## Wisconsin QSO Party Results Correction

*Please See Page 5*

### ELMER

**By Rich Regent, K9GDF**



Badger State Smoke Signals

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## Swapfests and Other Social Events

SATURDAY, JULY 6, 1991. South Milwaukee Swapfest. Held at the American Legion Post 434 on Shepard Ave. in Oak Creek, WI. Tickets \$4.00. Buy - sell - swap - food - drinks - camping. Happy time with free beer and soda. (For more details with map see the flyer ad elsewhere in this issue.)

SATURDAY, JULY 20, 1991. The International Order of bOzOs annual hamfest and computer fair, at the Village Lanes, Highway 57 North, Hilbert, Wisconsin. Indoor flea market, outdoor tailgating, famous Hilbert Brats, refreshments, open bowling, volleyball. Bring the family. Tickets \$3.00 advance, \$4.00 at door. Tables (8') \$7.00 advance and \$10.00 at the door. Contact: Mike Ortlieb, KN9P, W2104 Crosstown Rd., Hilbert, WI 54129. (414) 853-7073.

JULY 26-29. Experimental Aircraft Association Fly-In Convention. The Fox cities ARC (Appleton, WI) will operate W9ZL call from the EAA Fly-In and Convention in Oshkosh, WI.

SATURDAY, JULY 27, 1991. Annual Eau Claire Hamfest and Computer Expo., Eau Claire, WI. Contact: Liz Searing, N9EQR, 1129 McKinley Road, Eau Claire, WI 54701. (715) 834-1303. (see ad on last page and watch for flyer ad coming soon)

SATURDAY, AUGUST 10, 1991. Rhinelander Swapfest, sponsored by the Northwoods ARC, ARES, Tomahawk Repeater Association and the Rhinelander Repeater Association. Held at the Sugar Camp Town Hall on Highway 17, 12 miles north of Rhinelander. License exams given starting at 8:30 am. Auction at 1:00 by Col. Greg Garner, WA9W. For information contact Bob Berger, WC90, 307 Lois St., Rhinelander, 54501. (715) 369-3267. (Watch for ad in next months BSSS.)

AUGUST 23-25, 1991. 1991 ARRL NATIONAL CONVENTION AND HAMFEST. Saginaw, Michigan. Contact: 1991 National ARRL Convention, P.O. Box 1783, Saginaw, Michigan.

SUNDAY, SEPTEMBER 8, 1991. BARS Hamfest and Computer Fair, Joliet, IL. Contact Bolingbrook Amateur Radio Society, P.O. Box 1009, Bolingbrook, IL 60440. (708) 759-7005.

SEPTEMBER 21-22, 1991. PEORIA SUPERFEST. Exposition Gardens, Peoria, IL. Contact: Peoria Area Amateur Radio Club, P.O. Box 3508, Peoria, IL 61612-3508.

SATURDAY, OCTOBER 5, 1991. Fallfest '91 sponsored by the Green Bay Mike & Key Club, at the Green Bay Community Center, 1637 Dousman St. Amateur License exams administered between 9:00 am and 12:00 noon. For further information contact: Green Bay Mike & Key Club, P.O. Box 12631, Green Bay, WI 54307. (414) 432-3491.

SUNDAY, OCTOBER 13, 1991. KMRA Swapfest, Waukesha, WI. Contact: KMRA Swapfest, P.O. Box 276, Waukesha, WI 53187-0276

SUNDAY, NOVEMBER 3, 1991. The FOXCITIES HAMFEST 91, will be held at the Starlite Club on Hwy. 55 North of Kaukauna. For information contact Don Baker, NB9J, 621 W. 7th St., Kaukauna, WI. 54130. (414) 766-3886.

SATURDAY, JANUARY 11, 1992. Midwinter Swapfest, sponsored by the West Allis RAC, at Waukesha Exposition Center, Waukesha, WI. For more information see the ad on the last page.

SUNDAY, FEBRUARY 8, 1992. Midwinter Madness Hobby Electronics Show, Blain Minn. Robbinsdale ARC, P.O. Box 22613, Robbinsdale, MN 55422.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.

## Club Meetings

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the April 1991 meetings column for the latest complete listing. The following are additions or changes since that listing.

### FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)

First and third Tues - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave., room "C" downstairs. It is the next building west of the Hill Farms State Office building. The meetings start promptly at 7:30 pm.

## The Test Point

Amateur Radio examinations  
scheduled in and around Wisconsin

The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

July 27, 1991	Eau Claire, WI
August 10, 1991	Appleton, WI
September 4, 1991	Milwaukee, WI (MRAC)
September 7, 1991	Dubuque, IA
September 28, 1991	Milwaukee, WI (MRAC)
October 2, 1991	Milwaukee, WI (MRAC)
October 12, 1991	Eau Claire, WI
October 13, 1991	Waukesha (BE) KMRA Swapfest
October 26, 1991	Milwaukee, WI (MRAC)
November 2, 1991	Menomonie, WI
November 3, 1991	Kaukauna, WI
November 6, 1991	Milwaukee, WI (MRAC)
November 11, 1991	Onalaska, WI
November 30, 1991	Milwaukee, WI (MRAC)
December 7, 1991	Stevens Point, WI
December 4, 1991	Milwaukee, WI (MRAC)
December 7, 1991	Dubuque, IA
March 28, 1992	Menomonie, WI
November 7, 1992	Menomonie, WI

# Badger State Smoke Signals

## Officers and Staff

Chairman: Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage WI 53901. Telephone (608) 742-3560.

Editor: Jim Romelfanger, 412½ Ash Street, Baraboo, WI 53913. No telephone.

Treasurer: Jim Decker, WB9UQT, P.O. Box 337, Baraboo, WI 53913-0337.

## Subscriptions

1 Year	(12 issues)	\$9.75
2 Years	(24 issues)	\$18.00
3 Years	(36 issues)	\$26.00

Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

## Where to Send It

Address changes and corrections should be sent to Ken Ebnetter, K9EN, address above.

Editorial material, photographs, feature articles, display ads, and exchange papers should be sent to Jim Romelfanger, K9ZZ, address above.

Inquiries about advertising should be directed to Ken Ebnetter, K9EN, address above.

Subscriptions should be sent, with check or money order, to Jim Decker, WB9UQT, address above.

## When to Send It

The closing date for each issue is the first of the month for the next month's issue. (For example, the closing date for the May issue is April 1.) The only exception is for participating clubs. Participating clubs are requested to send their material no later than 7 days after the club's meeting. (For example, if your club meets on the 4th of the month, the material should be sent no later than the 11th of the month.) This material is to be sent to Jim Romelfanger, K9ZZ.

## Conditions for Reprinting Material from BSSS

Permission is hereby granted to reprint articles from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. This credit is mandatory, and no material may be reprinted unless it is given. This newspaper is mailed from Portage, WI 53901. This newspaper is produced for Radio Amateurs by Radio Amateurs. It is all volunteer and non-profit.

## Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other organization.

Monthly, First Sat. Racine, WI  
(except January, July & August)  
Monthly, Last Sat. Tomahawk, WI  
(January thru October only)  
Monthly, Third Sat. Loves Park, IL  
Minnesota tests listed at end of column

#### GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$5.25 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

#### MILWAUKEE RADIO AMATEURS' CLUB

##### MRAC/VEC

1991 examination dates:

WEDNESDAY: September 4, October 2, November 6, and December 4, 1991

SATURDAY: September 28, October 26, and November 30, 1991.

WEDNESDAY DATES: 7:00 pm to 10:00 pm at Wauwatosa East High School, North 74th and Milwaukee Avenue. Enter through the southmost entrance on 74th Street. Go to room 256 on the 2nd floor. Please arrive promptly, so testing can be completed before 10:00 p.m.

SATURDAY DATES: 9:00 am to 12:00 noon at the Wauwatosa Savings and Loan, 7500 West State St. (Lower level) Please arrive promptly so testing can be completed by 12:00 noon.

Bring along your original license and two (2) good quality photocopies, plus two forms of identification, such as a driver's license, etc. Also required are a pen and \$5.00 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: print the grade of license you are applying for, and your name, address, and telephone number. Send the card to MRAC/VEC, c/o Jack Krause, W9JK, 1737 North 116th Street, Wauwatosa, WI 53226, or to Ed Seruga, KE9JJ, 3840 South 43rd Street #21, Milwaukee, WI 53220. Telephones: (414) 774-6999 or (414) 545-6299.

BADGER EXAMINERS (BE) - MILWAUKEE  
Oct. 13. - KMRA Swapfest (Waukesha)  
Unless otherwise noted, examinations are

administered beginning at 1:00 p.m. to 3:30 p.m. at St. Nicholas Church basement, 5345 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Walk-ins are welcome. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to take., your call sign, address and telephone number to Badger Examiners, Gary J. Sharbuno, WI9M, 5119 W. Willow Rd., Brown Deer, WI 53223. Telephone (414) 355-0237.

#### MADISON, WISCONSIN (ARRL/VEC)

Exams will be held at Fire Station #6, on Badger Rd. (Just off South Park - Enter East door.) The test sessions will begin promptly at 8:00 a.m. Subsequent exams will occur in the fall of 1991. To be scheduled.

#### EAU CLAIRE, WISCONSIN

1991 dates: Jul. 27, & Oct. 12

Exams given at the UW/EC Maintenance/Central Stores Building, except for July 27, which will be at the 4-H Fairgrounds Hamfest site.

#### KAUKAUNA, WI

Held at the FOXCITIES HAMFEST 91, Starlite Club on Hwy. 55, North of Kaukauna. Exams begin at 9:00 a.m. Contact Larry, KD9IA at (414) 788-3823, or Don, NB9J at (414) 766-3886.

#### MENOMONIE WI - ARRL/VEC

Saturdays: Nov. 2, 1991 and Mar. 28 and Nov. 7, 1992.

The Northern Wisconsin Radio Club administers exams from 9 to 11:30 a.m. at the Westconsin Credit Union Building, lower level conference room, 444 S. Broadway, Menomonie, WI. Use front entrance of building. Walk-ins are accepted only to extent of available exam materials.

Contact: Jim Ley, NX9F, (715) 235-3998 (H); or (715) 232-1397 (O).

#### APPLETON, WI (ARRL/VEC)

Aug. 11, 1991

Sponsored by the Fox Cities ARC. All exams are held at Madison Jr. High School, 2020 S. Carpenter St., Appleton, WI. Contact: KD9IA, (414) 788-3823

#### ONALASKA, WI

November 11, 1991

Sponsored by the Riverland ARC. Held at the Onalaska Community Center, 515 Quincy St. All exams start at 7:00 pm. Preregistration recommended. Contact: Rick Williams KV9U, 524 Troy St., Onalaska, WI 54650. (608) 783-8028. or Dick Low, KOJYB, 1520 Nakomis Ave., La Crosse, WI 54603. (608) 784-9176 (After Apr. 5th.)

#### RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except  
January, July, and August.

Exams are given at 9:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walk-ins are permitted. Inquiries and registrations should be directed to William Firchow, Jr.,

NW9P, 1912 27th Street, Kenosha, WI 53140, telephone (414) 658-8390.

#### DUBUQUE, IOWA - ARRL/VEC

Exam dates for 1991 are: September 7, and December 7.

The Great River Amateur Radio Club VEs are now field stocked, which means retests can be given immediately.

Exams are held at 9:00 a.m. at the Central Fire Station, 9th and Central in Dubuque. Use the basement entrance on 9th Street. For more info, contact Mike Jozefowicz, NSOU, 2735 Hickory Hill, Dubuque IA 52001, or call Mike at (319) 582-8563. Talk-ins are on the 147.84/24 and 147.63/03 repeaters. -- (Thanks Art Evans, KA9KLZ)

#### TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Greg Garner, WA9W, 4088 Highway 51, Harshaw, WI 54529. Telephone (715) 453-7096.

#### LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Contact: Dennis G. Eksten, W9SS, 5006 N. Second St., Loves Park, IL 61111. (815) 877-6768.

#### MINNESOTA TESTS

July 13, 1991	St Paul, MN (SPARC)
August 24, 1991	St Paul Park, MN (SEMARC)
September 7, 1991	St Paul, MN (SPARC)
September 27, 1991	St Paul Park, MN (SEMARC)
October 12, 1991	Bloomington, MN (BARC)
November 9, 1991	Bloomington, MN (BARC)
December 7, 1991	St Paul, MN (SPARC)
December 14, 1991	Bloomington, MN (BARC)
December 21, 1991	St Paul Park, MN (SEMARC)

#### Locations and contacts:

St. Paul Radio Club (SPRC)  
St. Lukes School (cafeteria)  
1065 Summit Ave.  
St. Paul, MN  
contact: Jay Bellows (612) 222-7253

Bloomington Amateur Radio Club (BARC)  
Creekside Community Center  
98th and Penn Ave. So.  
Bloomington, MN  
contact: Art Putt (612) 881-7181

SE Metro Area Radio Club (SEMARC)  
St. Thomas Aquinas Activity Bldg.  
920 Holly Ave.  
St. Paul Park, MN  
contact: David Harrell (612) 459-1647

The above Minnesota tests are listed as a help to readers near or traveling thru the area.  
(continued on page 19)

## Wisconsin Nets Association Ltd.

Bob Towns, N9IAI, Secretary • 413 Pine Street • Waupaca, WI 54981

### Section Manager's Notes



Richard R. Regent, K9GDF  
5003 South 26th Street  
Milwaukee, WI 53221

May, 1991

Everyone is invited August 4th, Sunday, to this year's great *Picnic Ham* at Menomonee Park near Menomonee Falls and Lannon, within reserved picnic area #1 on the southeast side of Quarry Lake. Ham radio activities start at 11 a.m.; bring your own food please. Hiking trails, swimming beach, parking, cooking, camping available; more info from Section Emergency Coordinator WB9SMM.

Congratulations to W9DR of Milwaukee for being licensed 75 years, and receiving certificate from QCWA.

August 10th, Swapfest at Sugar Camp Town Hall, 12 miles north of Rhinelander, with amateur exams; contact WC9O.

August 18th, the Shawano Bike Race has volunteer communicators from the Fox Cities ARC.

Four Lakes ARC has Fox Hunt as their August 20th meeting, starting at the Red Cross Building, per KC9XH.

August 24th, the Fox Valley Club holds their corn roast near Appleton.

August 28th, 2 MHz of the 220 MHz band are lost.

Milwaukee RAC nine-week Fall Amateur Radio classes start August 28th; info from WB9BWP.

### Wisconsin Nets

Net	WNA	Freq.	UTC	CST	Mgr.
BWN	Yes	3984	1100	0600	W9AYK
BEN	Yes	3985	1700	1200	WB9ESM
WSBN	Yes	3985	2230	1730	K9UTQ
WNN	Yes	3723	2300	1800	KA9FVX
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9NGP
NWTN	Yes	34/94	2330	1830	NS9Q
(Rhinelander area)					
6:30 Net	No	01/61	2330	1830	KA9OMC
Gr. Bay	No	72/12	0145	2045	WB9NRK
(Green Bay area)					
ARES	No	4.65/5.25	0100	2000	
(South East/South Central Wisconsin)					
RACES	No	3993.5	1715	1215	WC9AAG
(USB Tuesday and Thursday)					
RACES	No	3993.5	1300	0800	WA9OAY
(LSB Sunday)					

The Rock River RC will offer an Advanced Class in the Fall, info from instructor WA9ZTY.

For more Amateur Radio activities, listen to the Public Service Net on 146.91 MHz, Sundays at 8:30 p.m.

Madison ARES Net meets Wednesdays at 8:30 p.m. on the 146.34 repeater.

New Madison landline computer BBS, called Ham Star, can be reached by phoning (608) 277-8998.

KE9XQ, our ACC, has repeaters on 29.64 and 146.865 MHz in La Crosse.

Wisconsin Association of Repeaters has been making its presence known at swapfests.

## Florida Gets a Handle on Antenna Regulations

"A bill to protect amateurs' antenna rights (House HB-203) has passed both Florida Senate and House in mid-April, and is now law," according to *QST*, June, 1991, page 58.

Government officials, favorably impressed by ham activities in support of emergency efforts during the 1985 hurricane that hit Tallahassee, coordinated officials, the Florida League of Cities, the Florida Association of Counties, and House lawyers, to orchestrate the bill's wording.

It was pointed out that "the bill wouldn't take power from local governments, but their limits on antennas would have been struck down in court anyway, since federal rule takes precedence."

"This is a tax-savings measure for citizens, because local governments can't win in court," Sen. Richard Crotty (Rep.) told the *Orlando Sentinel*.

Let's hope that more states follow Florida's example.

- Jim Zabel, W9KNZ  
Local Government Liaison  
Wisconsin Section ARRL

160 Betty Ln., Brookfield, WI 53005

Wisconsin Indianhead Technical College in Superior, Antigo Repeater Association, and Ashland High School are applying for ARRL club affiliation.

West Allis RAC Novice classes are doing well; each student who gets a license is granted a one-year free club membership.

Newly licensed KB9GSB, of Brookfield, is nephew of NK9G.

Sorry to report Silent Key W9WDK.

Thought of the month: *Two monologues do not make a dialogue.* □

## Wisconsin Maxim Nominations

By Richard R. Regent, K9GDF  
ARRL Wisconsin Section Manager  
5003 South 26th Street  
Milwaukee, WI 53221

A thousand bucks, a plaque, and travel and accomodation to attend an ARRL convention will go to a young amateur chosen to receive the Hiram Percy Maxim Memorial Award for 1990.

Since 1936, the Hiram Percy Maxim Memorial Award has been awarded annually by the American Radio Relay League in recognition of a young (under 21) amateur's accomplishments and contributions in public service, technical development, operating recruitment, public relations, and other amateur-related activities.

Wisconsin has two candidates in the running, KB9GHE and KE9RW.

David J. Bahr, KB9GHE, became licensed as a Novice in February, 1991, at the age of 11. In June, he passed the Technician exam.

Dave is a fifth-grade honor student at Sheridan Elementary School in Sheboygan, where he occasionally gives class reports about his interesting radio contacts. His teacher and other students enjoy discussing electronics, using Morse code, and making contacts with foreign countries. Dave's dad is WB9FXQ.

Steven Kraft, KE9RW, was licensed in January, 1988, as a Novice, KB9AHE. He now holds an Advanced Class license.

Steve is president of the Menomonie High School ARC, where he got their club on packet radio. He is a member of the Northern Wisconsin Radio Club, where he was secretary for two years and is now president. He is also an ARRL member.

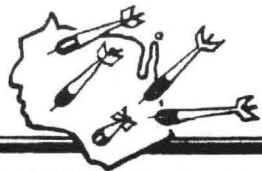
KE9RW enjoys public service communications, and helps in the High School Winter Carnival toboggan races and Homecoming Parade, plus others like the Tinman Triathlon; Lutheran Brotherhood Walk, Bike, Run; Sprinting Spokes Wheelchair Race; CROP Walk for Hunger; Cerebral Palsy Walkathon; and March of Dimes Walk.

Steve likes helping at Field Day, watching for severe weather, being a Net Control Station, helping work on the repeater, giving instruction to new Novices, sharing equipment information, reading on-the-air bulletins, programming handheld transceivers, and connecting radios and computers for the digital modes.

Steve's mom is Arlene, KF9CU.

Wisconsin has been fortunate enough to have had winners of this award in the past. In 1986, Scott Young, N9FZS, of Colby, and in 1987, Stacey Garner, KA9WDE, of Harshaw, were winners, and I presented them each with a thousand dollar check. Maybe we can have a winner again this time. □





## HERE and THERE



During May, hundreds of Boy Scouts came to Baraboo for a Camporee. A number of groups, clubs, and agencies had displays for the Scouts to see and, in some cases, to help the Scouts meet some merit badge requirements. Above, Don Evenson, K9JYX, Baraboo, a member of the Baraboo Volunteer Fire Department, models an air mask firemen wear when entering a burning structure. The mask and related equipment add 80 pounds to the fireman's weight. More photos are on page 15 of this issue.

**FCC-ISSUED CALL SIGN UPDATE:** The following is a list of the FCC's most recently issued call signs (as of May, 1991):

District	Group A Extra	Group B Adv	Group C Tech/Gen	Group D Novice
0	AA0EM	KF0RE	N0NQV	KB0IZM
1	WR1W	KD1BA	N1IYT	KA1YSX
2	AA2EF	KF2BO	N2MIO	KB2MVA
3	WN3D	KD3WU	N3JIM	KA3YYE
4	AC4EI	KO4BA	**	KC4ZYL
5	AA5YD	KI5PW	N5TEW	KB5PPE
6	AB6CK	KM6AK	**	KC6UQF
7	AA7IN	KG7PG	N7RMA	KB7NNH
8	AA8DO	KF8NE	N8OHD	KB8MMD
9	AA9AP	KF9DH	N9LEC	KB9GRW



HE WANTED TO GO UP FOR BETTER RADIO PROPAGATION, BUT OL' ST. PETE TOLD HIM WHERE HE'S GOING, HE'LL HAVE AN EXCELLENT GROUND!

## Correction to Wisconsin QSO Party Results

One of the top ten scores in the Single Operator/Fixed Station category in the Wisconsin QSO Party was accidentally omitted from the official results published in June, 1991 *Badger State Smoke Signals*. The entry left out was WB9HRO, who had the 8th highest score with 35,366 points operating

from Sawyer County. The information was complete as supplied to BSSS on computer disk by the party's sponsor, the West Allis Radio Amateur Club; the omission occurred during pasteup on my kitchen table. My apology for the omission. The top ten scores are listed below. - Editor

CALL	COUNTY	CLASS	CW PTS	SSB PTS	MULT	BONUS PTS	FINAL SCORE	CLUB AFFILIATION
<b>Single-Operator/Fixed</b>								
W9XT **	Washington	SF	126	613	97	0	71683	Kettle Moraine ARC
W9UP *	LaCrosse	SF	208	414	93	0	57846	Riverland ARC
								Op: KA9FOX
WA9TZE *	Milwaukee	SF	346	230	99	0	57024	W/K ARC
K9OSH *	Waukesha	SF	82	470	79	0	43608	Kettle Moraine ARC
K1TMM *	Milwaukee	SF	122	355	90	0	42930	Kettle Moraine ARC
N9AW *	Milwaukee	SF	154	327	77	0	37037	W/K ARC
WA1UJU *	Waukesha	SF	184	270	79	0	35866	Kettle Moraine ARC
WB9HRO *	Sawyer	SF	158	289	78	500	35366	
WG9U *	Milwaukee	SF	192	249	75	0	33075	W/K ARC
NK9G *	Milwaukee	SF	220	189	77	0	31493	W/K ARC

\*\* PLAQUE \* CERTIFICATE

Hawaii **	AH6LG	NH6ZY	WH6CMP
Alaska **	AL7NA	NL7XC	WL7CCF
Puerto Rico **	KP4RV	**	WP4KAN

\*\* All call signs in this group have been issued in this area.

- The ARRL Letter, 5/30/91

**THE WISCONSIN NETS ASSOCIATION** voted, at its meeting held at the Stevens Point Swapfest on June 16, to hold its annual picnic at Ochsner Park in Baraboo on Saturday, September 7. The park has a zoo and a playground for the kids. Camping is not allowed at the park, but there are many private campgrounds in the area, and it MAY be possible (with a bit of luck) to get a camping space at Devils Lake State Park, just three miles south of Baraboo. If you wish to check site availability at Devils Lake, call their reservation telephone number, (608) 356-6618. More information about the picnic site will appear in the August issue of BSSS.

**IN ANTICIPATION OF A FLOOD OF PHOTOS** of hams in action at Field Day sites in and around Wisconsin, we have planned a 24-page issue for

August. We hope the flood materializes, and that we won't have to fill the issue with fillers! Please include full names and call signs of all hams shown in your photos, and tell us the location of your Field Day operation. Please send your properly focused, correctly exposed color or black and white photos to Jim Romelfanger, K9ZZ, Editor, 412 1/2 Ash St., Baraboo, WI 53913. Please remember that we do not normally return photos.

**ARRL HEADQUARTERS HAS A JOB OPENING FOR A WIAW OPERATOR.** The successful candidate must be able to work evenings and weekends without direct supervision, be skilled in the use of IBM compatible computers, and be able to trouble-shoot and repair electronic equipment. Starting salary range is \$17,433 to \$19,188. For more information, contact Acting Chief Operator Jeff Bauer, WA1MBK, at 203-666-1541, extension 268.

- The ARRL Letter, 6/13/91

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Send this form, with your check or money order, to Jim Decker, WB9UQT, Treasurer, P.O. Box 337, Baraboo, WI 53913. **Please do not send cash!**



# Scott Santoski, KB9DVS, Earns Eagle Scout Rank



Here's Scott Santoski in 1975, at age 2. He's already getting familiar with his dad's Amateur Radio gear.

- Photo by Gene Santoski, K9UTQ

## Coast to Coast Bicycle Classic

In 1991, the Coast to Coast Bicycle Classic™ will take 50 riders across the U.S., starting in Seattle, WA, on June 3, and ending in Asbury Park, NJ, on July 20. This year, instead of being associated with just one major charity, each of the riders will have raised more than \$6,000 for the charity of their choice. They will go through Wisconsin starting July 1 or 2, and exit the state July 4 or 5. Please make their Amateur Radio helpers welcome as they traverse your area!

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On Saturday, April 20, 1991, Scott Santoski (KB9DVS) of Wisconsin Rapids, and the son of Gene (K9UTQ), was elevated to the rank of Eagle Scout - the highest rank in Scouting - at a Court of Honor in Wisconsin Rapids.

Scott has been a member of Troop 171 since he 1986, and has earned a total of 21 merit badges. He has also earned three religious awards, and last summer was inducted into the Order of the Arrow. He attended the 1989 National Boy Scout Jamboree at Fort A.P. Hill in Virginia.

While advancing to the rank of Eagle he has held various leadership positions in the troop, which include Assistant Patrol Leader, Patrol Leader, Troop Guide. He is currently Senior Patrol Leader. Gene, K9UTQ, is Scoutmaster of the troop.

For his Eagle Service Project, Scott organized and directed other Scouts in the painting of an agricultural barn at Lincoln High School in Wisconsin Rapids.

Scott has been an Amateur Radio operator since February of 1990, and presently holds a Technician Class license. Scott is also interested in computers.

He is 16 years old, and will be a Junior in high school this fall.

- Gene Santoski, K9UTQ

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More news and photos about Amateur Radio and Scouting are on page 15 of this issue.

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## League: FCC "Missing the Issue" in Scanner Laws

The Federal Communications Commission has "missed the basic issue" in its inquiry into local laws regulating radio receivers, the American Radio Relay League has said. On June 7, the ARRL replied to an FCC Notice of Inquiry, released last February, in which the Commission sought more information regarding local "scanner laws" (see *QST* for May, p. 59, and June, p. 61).

In its NOI (in PR Docket 91-36), the FCC - responding to the League's request for a declaratory ruling - asked questions about conforming Amateur Radio equipment to meet a handful of local and state laws that prohibit operation of radio equipment in automobiles and trucks.

The League had sought to protect amateurs' freedom to own and to operate from their vehicles radios which could be tuned to frequencies other than the amateur bands.

In the extant reply, the League reiterated this objective, noting that federal law should preempt any municipality or state government from the regulation of radio receivers.

The League once again notes the "prototypically overbroad" New Jersey statute that makes it a misdemeanor to operate from an automobile any radio receiver capable of listening on fire, police, municipal, or other "governmental" frequencies - unless the user obtains a permit from a government official.

The reply also notes that an amateur commits a misdemeanor merely by carrying an HF transceiver through new Jersey in the trunk of his car.

The League now tells the Commission it believes such laws are in conflict with Federal jurisdiction over radio communication and asks FCC to declare them so.

Since only a few such laws currently exist, therefore "there is no basis whatsoever" for consideration of modifying or "type-accepting" amateur equipment to conform to such laws, a possibility that is suggested by the issuance of the FCC Notice of Inquiry.

The Tandy Corporation has supported the League's position, in comments filed with the FCC on June 7. Tandy in addition "urges the Commission to preempt such state statutes and local ordinances as they affect not only amateur transceivers but also all other types of radio equipment, including marine transceivers, scanners, and other mobile equipment."

Tandy agreed with the League that the Commission's questions concerning the possibility of modifying or "type accepting" all equipment in order to meet the occasional local law "serve no useful purpose because [federal] preemption will moot the need for any such information."

On a related note, in Israel in order to legally purchase a VHF/UHF scanner radio, the Ministry of Communications requires the applicant either have a journalist's credentials or *be a member of the Israel Amateur Radio Club*, according to the publication HaGAL.

The IARC, in answer to questions about why only a third of the 150 people who had applied for membership in the past year had been accepted, said "many people interested in no more than listening to police calls and cellular telephone conversations have been knocking on our door. The policy of the membership committee has been to prefer accepting only those with with a real interest in amateur radio than bolstering the club treasury with an additional 8,000 shekels."

- The ARRL Letter,  
June 13, 1991

## How to Renew a Commercial FCC License

If you love doing your federal taxes, you'd really enjoy renewing an FCC commercial operator's license. There aren't many such licenses left these days. I wonder why.

Years ago, the First and Second Class Radiotelephone licenses became the General Radiotelephone Operator License (GROL), valid for the lifetime of the holder (unless suspended by the FCC). There went my First 'Phone of July 19, 1961; it became a GROL. The FCC also removed the Radiotelegraph Aircraft Endorsement from renewals after June 15, 1984. There went my Aircraft Endorsement that I had had for 22 years.

Let's see now, what commercial license was there left to renew? Back on January 29, 1960, I got the Radiotelegraph Third Class Operator Permit. This was cancelled when, on July 19, 1961, I passed the Radiotelegraph Operator Second Class license exam, and endorsed when I passed the Ship Radar Endorsement exam on April 25, 1962. There's something I can renew!

My Second Class Telegraph was expiring on March 10, 1991. So, early in the year, I wrote to the FCC (Federal Communications Commission, P.O. Box 358105, Pittsburgh, PA 15251-5105), requesting renewal forms.

Three weeks later, I received Renewal Form 756, Form 756 Instructions, Fee Processing Form 155, and Fee Filing Guide (a 5-page booklet). It was interesting to read that, besides the commercial radio operator application fees for exams, renewals, duplicates, or replacements, the FCC apparently also inspects ships and charges fees ranging from \$60 to \$620.

I completed the application, but couldn't figure out if I should include my original expiring license. On the application, I checked that I wanted my Radar Endorsement renewed also; might as well see what happens. I enclosed a copy of my GROL that had the endorsement. I figured this would flag me for an audit right away!

Radiotelegraph licenses have the operator's photo on them. The FCC doesn't ask for anything special, just "two identical photographs taken within the past six months, signed by applicant on the front along the left side. The signature must be clearly visible; not less than 2x2 inches nor more than 2-1/2 x 3 inches,

clear full face (head and shoulders) black and white or color with a light, plain background. Large Polaroid photographs that cannot be cropped are not acceptable." So I included the photos, already.

The FCC Fee Filing Guide made it very clear that the fee to renew my license was \$35, so I included a check and mailed the works in.

Two weeks later I got a form, clipped to my original paperwork, requesting my original license. I noticed they had removed and kept my check. Aha! They need the money! Add one original license, and mail the works back in again.

Two weeks later, I got a form, clipped to my original paperwork, requesting remittance of \$35 - which they stated "Did not accompany original submission." Enclosed was another Fee Processing Form 155 and Fee Filing Guide. Fortunately, by this time, I had my cancelled check from the bank, so I copied both sides of it and attached a carefully written note: "Remittance did accompany my original submission, see copies of cancelled check. You have my \$35.00 fee. Thank you," hoping they would understand the language.

Three weeks later, I received my renewed Second Class Radiotelegraph Operator's Certificate, number T2-HQ-10344, on Form 758-D, good five years until March 18, 1996. It had the Radar Ship Endorsement and the photo of me! Now, that wasn't so hard to do, was it?

I'll have to get my strength up and save my coins, because the FCC notes that: "Fees are subject to review in October, 1993, and may result in changes to these amounts." A pleasant thought for the next time I have to renew.

So long as we few crazy people keep renewing our commercial licenses, the process may go on forever.

By the way, the BSSS is not and I am not responsible for the accuracy of this information on commercial license renewals. It is always best to contact the FCC for the latest procras..., er, procedures. Good luck!

- Richard R. Regent, K9GDF  
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## Morse Telegraph Club Chapter Holds Annual Meeting in North Freedom

By Bob King, KA9GNY  
411 Lynn Avenue  
Baraboo, WI 53913

On Saturday, April 27, 1991, sixteen members of the "MW" Chapter of the Morse Telegraph Club gathered at the Mid-Continent Railway Museum depot at North Freedom, WI for their annual meeting and, this year, to celebrate the 200th birthday of the inventor of the electromagnetic telegraph, Samuel F. B. Morse.

Until two years ago, Western Union had set up a "round robin" telegraph line so that all MTC chapters in the U.S. and Canada could communicate with each other (all the chapters hold their annual meetings on the same day).

Since Western Union discontinued furnishing the telegraph line, some members of various chapters have been experimenting with equipment which allows the use of telegraphy over regular telephone lines. Notable among these members are Bill Dunbar (AD9E), who is Grand Chapter President and the editor of the MTC's quarterly newspaper *Dots and Dashes*; Sid Vaughn (NØDJD) and Larry Moe (KØSIA), both from Iowa and both MW Chapter members; and Ace Holman of the Pennsylvania Chapter. They have come up with some very interesting stuff, starting out with a Radio Shack DCM-6 modem and an originate-only Western Union terminal.

Because the usual telephone lines are analog in nature, we have to use tone signals and then convert them to open/close DC pulses to operate the sounders, while not losing the telephone connection. This sounds simple but it is rather tricky, dealing with varying voltages and currents from one telephone system to another.

This year, Sid and Larry came out with a new converter which very nearly duplicates a straight landline telegraph circuit. Using this system this year, we made contacts with Canberra and Alice Springs, Australia via landline and satellite with very good results. Contacts were also made with Huntington, West Virginia; Florida; and with the Grand Chapter in Chicago.



Members of the MW Chapter of the Morse Telegraph Club posed for this photo during their meeting in North Freedom on April 27, 1991. From left to right are Doug Hanson, Baraboo, WI; Marc Deneen, Riley, WI (near Verona, WI); Larry Moe (KØSIA), Marion, IA; Sylvester Eckstein, Madison, WI; Sid Vaughn (NØDJD), Mt. Vernon, IA; Orrin Jenks, Lake Mills, WI; Delrosa Bruhns, Middleton, WI; Chas White, Madison, WI; Tom Eckstein, Madison, WI; Fred Becker (W9KKM), Wisconsin Dells, WI; and Frank Heitke, Richland Center, WI. On the steps are Keith Porter, Milwaukee, WI; Bob King (KA9GNY), Baraboo, WI; Bob Johnson, Madison, WI; Jim Reidelbach, Wisconsin Dells, WI; and Paul Schult, New Lisbon, WI.

- Photo by Jim Romelfanger/K9ZZ

The MW Chapter members enjoyed a chicken dinner at the Railroad Inn in North Freedom.

About 50 members of various chapters are now equipped with modems and converters, and are looking forward to making more frequent contacts via "wire".

The Morse Telegraph Club is dedicated to the memory of Samuel F. B. Morse and to his telegraph, which opened the world to progress; the telegraph made communications nearly instantan-

eous.

Today, you can hardly touch a piece of electronic equipment which does not contain some of the basics of Morse's invention. The binary system in computers is essentially the on/off system of Morse code. The solenoid in your automobile's starter, the relays in your ham gear, the transmitter and receiver in your telephone, and so on.

This writer personally thinks the telegraph was the greatest invention since the wheel! □

## Capitol Hill Hams Host Morse Memorial on 200th Anniversary of Inventor's Birth

May 24 marked the anniversary of the sending of the first long-distance message by telegraph, by inventor Samuel F.B. Morse in 1844. In recognition of the year 1991 being the 200th anniversary of Morse's birth, the Capitol Hill Amateur Radio Society reenacted this moment in history on Thursday morning, May 23. The historic message, "What hath God wrought," once again passed from the nation's Capitol building to Baltimore.

Using an original 1840s telegraph key, the Honorable George M. White, W3HDO, Architect of the Capitol, tapped out the famous message to the B&O Railroad Museum, now located on the site where the original message was received by Morse's colleague, Alfred Vail. Playing the part of Vail at the Baltimore end of the circuit was Bernie McClenny, WB3JRU.

Also playing a role in the reenactment was Jo Ann Morse, wife of Judge Robert F.B. Morse, who played Annie Ellsworth. Ellsworth was the daughter of the Commissioner of Patents in 1844, and the individual who selected the

passage from the Bible as the text for the first transmission. Judge Morse is the great-great-grandson of the inventor, and is a County Court Judge in Georgetown, Texas, near Austin.

### The President Sends His Greetings

President Bush sent greetings to the members of the Capitol Hill Amateur Radio Society and to Judge Morse to mark the occasion. "Samuel Morse's pioneering work in telegraphy launched a new age in communication and in the development of our Republic," the President said. He noted Samuel Morse's contributions as a respected artist, as well as an inventor.

Please turn to page 13



## New Products

### Icom IC-2410A/H Dual Band Transceiver

Icom announces the new IC-2410A/H 144 and 440 MHz dual band transceiver. Setting the pace in mobile technology, the new IC-2410A/H mobile does it all! Revolutionary features include simultaneous receive on the same band, microphone controllable, and optional remote control.

- **Classy and compact:** The sleek design of the IC-2410A/H makes it one of the smallest dual band transceivers in its class, measuring only 5.5" W x 1.6" H x 6.9" D, and weighing just three pounds.

- **Simultaneous receive on the same band:** The new IC-2410A/H will make history in the dual band mobile market with this new feature! In addition to receiving two bands simultaneously, it is the first mobile to receive two frequencies simultaneously on the same band.

- **Versatile output power:** The IC-2410A/H comes in two versions. The IC-2410A puts out a maximum of 25 watts on both UHF and VHF. Maximum output power for the IC-2410H is 45 watts on VHF and 35 watts on UHF. Both versions offer high, medium, and low power settings.

- **Microphone controllable:** A variety of operations can be controlled with the HM-56 DTMF hand microphone and optional UT-55 DTMF encoder/decoder, such as: setting the MAIN band on VHF or UHF, entering memory or VFO mode, direct entry of frequencies and memory channels, selecting HIGH or LOW power, plus a number of other features.

- **Optional external remote control:** Use other handhelds or other transceivers capable of DTMF operation to remotely control the IC-2410A/H (optional UT-55 DTMF encoder/decoder unit required). You can even have the frequency read back to you via your remote transceiver, by installing the optional UT-66 voice synthesizer unit.

- **Crossband repeat:** The IC-2410A/H has crossband repeat capability with repeater offsets on both bands. When in crossband repeat mode, the IC-2410A/H is capable of receiving a sub tone on the input frequency while transmitting a different sub tone on the output frequency (optional UT-67 tone squelch unit required).

- **36 memory channels:** Each band is equipped with fifteen memory channels, 2 scan edge channels, and 1 call channel. Plus, the HM-56 microphone has 14 DTMF memory channels. Ideal for autodialing!

The IC-2410A/H also includes many other popular features, such as separate volume controls for each band, a variety of scan modes, built-in duplexer, memory to VFO transfer capability, RF attenuator, optional pager and code squelch units, optional tone squelch and pocket beep units, selectable intensity for LCD and 1 MHz step tuning.

The new and innovative IC-2410A/H will be available in July, 1991. Pricing is to be announced.

- Icom news release

## Active Waupaca Club Member to Turn 92 in July



Van Boyce, W9CIZ, pictured at left, a life-long resident of Waupaca, WI, will turn 92 years young on July 13, 1991.

Van was born in Waupaca in 1899, where he grew up, went to school, and worked as a farmer and as a radio-electronics repairman until he retired in 1970. He, like many men during this period, served in the Armed Forces during the war years. But, except for the war, Van remained in the Waupaca area all of his life.

In 1932, Van traveled to Green Bay, where he tested and received his Amateur Radio license.

On Wednesday, August 15, 1958, Van, along with 11 other amateurs, attended an organizational meeting of the Waupaca Amateur Radio Club. It

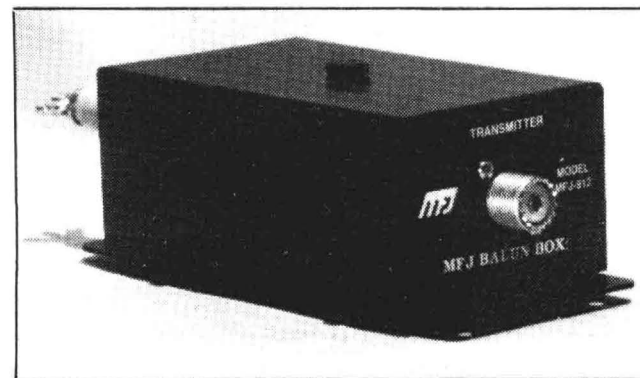
didn't take long before Van was elected Vice-President of the club.

Van has faithfully supported the Waupaca Amateur Radio Club. He has seen his share of hams come and go, but Van remains loyal to the club he helped found. All the hams in the Waupaca area, and all hams traveling through Waupaca who turn their 2-meter rigs to 147.39 at 8 a.m. any day of the week know Van as the Net Control of the famous Geritol Net. Van has run this net, without fail, at precisely 8 a.m., longer than anyone can remember. In fact, those who know say that WWV sets its clocks by Van's net.

The next time you're traveling through the Waupaca area, turn to 147.39 and find out for yourself. And, while you're at it, don't forget to wish Van a VERY HAPPY BIRTHDAY!

- Carl Lassanske, N9JXB

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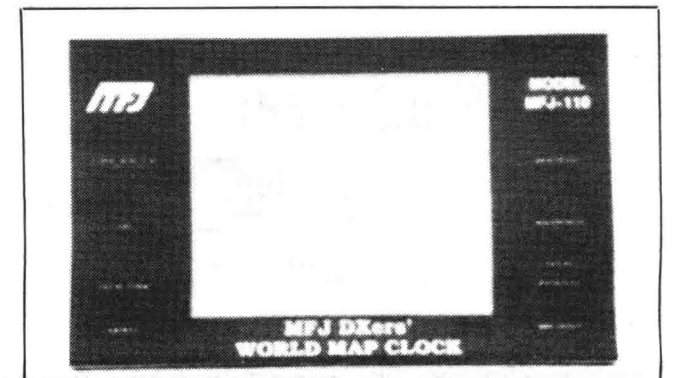
MFJ-912 W9INN Balun Box

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The MFJ-912 comes with MFJ's one-year unconditional guarantee.

- MFJ news release



MFJ-110 DXers' World Map Clock

MFJ Enterprises, Inc. announces the release of the new MFJ-110 DXers' World Map Clock, priced at only \$24.95.

The new MFJ DXers' World Map Clock not only shows you the time and date at any QTH in the world - it also lets you see the place where your contact is. It's the neatest ham logging clock on the market.

The MFJ-110 DXers' World Map Clock also shows the day of the week, month, date, and year.

Easy-to-use pushbuttons let you instantly move the display to a QTH in every time zone. The recall feature instantly moves the display back to local time. It also features an alarm. The map is tan on a gold background, with a black border. The clock measures 5-1/4" x 3-1/4" x 2/3".

It comes with MFJ's one-year unconditional guarantee.

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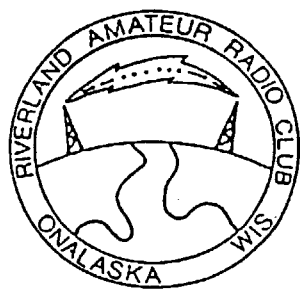
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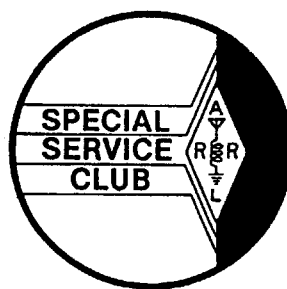




## Riverland Amateur Radio Club

Karl Simonson, KB9EQI, Secretary

P.O. Box 2251 • La Crosse, WI 54602-2251



### Meeting Minutes June 4, 1991

The June meeting of the Riverland Amateur Radio Club was called to order by our President, Walt Altus, AA9AW, at 7:45 p.m. on June 4th.

The secretary's report was read from the *Badger State Smoke Signals* by our Secretary, Karl Simonson, KB9EQI. There were no additions or corrections, and the minutes were approved as read.

The treasurer's report was given by our Treasurer, Arby Boomer, WF9T. The report was approved as read.

Nook, K9EGO, asked what is being done in regards to the individuals who have not paid their annual dues. A mailing is being prepared by the secretary of the club as a reminder to those who have not yet renewed their membership.

Tom, N9KIA, gave a report of the Field Day Committee, and asked that anyone interested in participating in this year's event sign up for the event and time they are available for.

Charlie, KA9UUK, asked about the possibility of a different location for Field Day activities. This will be researched by the committee members.

Other comments relative to Field Day were heard and addressed.

A motion was made by Dean, KQ0C, and seconded by Joe, WA9SOQ, to purchase a used generator for the club's use. After a few brief comments, Karl, KB9EQI, asked the motion be voted upon. Charlie, KA9UUK, requested a show of hands ballot. The motion carried unanimously.

More comments on Field Day supplies were heard.

Our Program Committee Chairman, Feroz, WU9N, said that there will be a mini-swap meet

after the July meeting. **ALL AREA HAMS ARE WELCOME!** Joe, WA9SOQ, suggested that something be done for additional publicity of the mini-swap. Announcements will be made on the area repeaters, and a bulletin will be placed on the local packet BBS.

Kent, W9LZQ, said that a picnic is being planned for late August. The picnic is to be a get-together for members of the La Crosse and Winona area clubs. Kent moved that a chairperson be appointed to help coordinate the event, and that \$50.00 be allowed for expenses related to the picnic. George, KE9PL, seconded the motion. The motion was approved. Feroz will be the chairman.

Feroz gave a report on the overwhelming success of the June Riverland Amateur Radio Club Picnic. There was an HF station and a packet station set up for the picnic. Anyone who did not attend missed out on lots of fun.

Feroz informed us that experimentation is being conducted on the TCP/IP packet radio protocol. Handouts were available for those interested.

Charlie said that a request was made that the club conduct election of officers by a mail-in ballot. This would require constitutional changes. A slate of candidates would need to be introduced well in advance of the annual meeting to facilitate this type of election. There was no motion made to change the existing election policy.

Van, WA9FIO, voiced a word of thanks to the persons who served on the trailer committee. The thanks of the entire club was heard for the job well done.

Walt said that a committee is needed for the refurbishment of the trailer for club activities. The committee will consist of the club officers.

Rick, KV9U, moved that the club allow

\$100.00 for Field Day expenses. Charlie seconded. The motion was approved. Part of the funds will be used to purchase towing lights for the club's portable tower trailer.

Kent expressed his thanks to those who participated in the recent SkyWarn nets.

A guest was introduced: Jim, K9OQO, of Appleton, WI.

Congratulations go to Scott, KA9FOX, for placing second in the Wisconsin QSO Party, and on winning the Sweepstakes contest.

Rick moved, and Kent seconded, the motion to adjourn.

*Respectfully submitted:*  
Karl Simonson, KB9EQI, Secretary

### Meeting Attendance

Dick Low	K0JYB
Karl Olberg	W4ST
Dallas Miller	K9LEC
Richard Fink	N9KLU
Walt Altus	AA9AW
Nook Bentzen	K9EGO
Joe Mazera	WA9SOQ
Greg A. Miller	KA9FOZ
Lee Fortun	WW9O
Tom Gromacki	N9KIA
Arby Boomer	WF9T
George Kroner	KE9PL
Hugh Barker	KA0EJZ
Rick Williams	KV9U
Bill Wood	KE9XQ
Jack Yoshizumi	W9KTD
Kent Helman	W9LZQ
Feroz Ghose	WU9N
Larry Kapp	WT9M
Jule Kish	KA9UJL
Scott Neader	KA9FOX
Art Osborn	W0JDC
Jim Sheetz (Guest)	K9OQO
Charlie Burch	KA9UUK
Van Elston	WA9FIO
Ray Wakeen	WA9HHM
Dean Summers	KQ0C
Karl Simonson	KB9EQI

## Northern Wisconsin Radio Club

Steve Hart, KA9OMC, Secretary

- Since 1923 -

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Greetings, NWRC members and guests.

The last spring meeting of NWRC was held at the Peppermill Restaurant in the Thunderbird Mall, Menomonie, on April 23.

President Steve, KE9RW, presided over the meeting. Steve, KA9OMC, read the summary of secretary's and treasurer's reports.

In business, KA9OMC passed out an almost complete roster of dues-paid up members.

The NWRC has sent BSSS a check for \$25 to use as they see fit.

Al Schlaugat, N9ISN, extended his invitation to the club to conduct Field Day exercises at his farm near Colfax.

After a short meeting, the film *More Than Radios* was presented. Steve, KE9RW, also presented additional films on new test technology. Our thanks to Steve, and also to Ron, WB9WKO, for bringing

the video equipment.

See you at Field Day!

Steve Hart, KA9OMC  
Secretary/Treasurer



# SSB

SELL SWAP BUY

OUR WANT ADS GET RESULTS

**FOR SALE:** TS-830S in MINT condition. Enhanced with 400 Hz CW filter (Fox-Tango) and matched 2.1 KHz SSB filters from International Radio. Complete with original carton, Owner's and Service manuals. Will deliver within 100 miles. Asking \$750, will consider offers. Call Mike, KA9LAQ at (715) 341-7346 evenings.



# Eau Claire Amateur Radio Club

**Carl Searing, W9NW, Secretary**

**1129 McKinley Road • Eau Claire, WI 54703-2219**

## Minutes: June 11, 1991

The meeting was opened by President Bill Jablonske, W9NNS, at 7:40 p.m. The secretary's and treasurer's reports were read and approved.

The upcoming July 27th hamfest was discussed at length, and several areas of concern were covered. Signup sheets were circulated for setup and teardown, food, tickets, tables, security, etc. There was discussion about an area to be set aside for tailgaters. Prizes were formulated. The possibility of using the fairgrounds in Chippewa Falls next year looks good. It will give us the capability of expan-

ding, with every exhibitor under cover.

Jeff Sorte, N9JMB, our local EC, talked on the tornado season that is upon us, and there was some discussion of spotters and of cooperation with local authorities, both in law enforcement and with local weather people. He distributed some material pertinent to SkyWarn.

N9JMA, N9JMB, and N9ISN will act as a committee to revise the club "Blue Book", the club's guide to efficient local operation of the repeaters. Among subjects to be updated are the sections on nets and repeater ethics. The committee is to report to the club as a whole.

N9JMB said that volunteers are wanted for the August 24 "Wildfire" exercise, which will be held east of Altoona. Communicators are needed to help coordinate training of volunteer fire departments lacking a common operating frequency. He has been notified of plans for a major simulated emergency (plane crash) to occur next Spring. Hams will be needed to work with the Red Cross and various public service agencies.

N9JMA indicated that the city of Chippewa Falls would like radio amateur assistance in time of emergency or times of civic need.

The membership was reminded of the upcoming Field Day at N9ISN's farm in Chippewa County. The club trailer will be used. The event is sponsored by the Northern Wisconsin Radio Club, and many Menomonie area hams should also be present.

Lunch Committee: N9ISN, N9JMA.

Meeting adjourned at 8:50 p.m.

*Respectfully submitted:*  
W9NW, Secretary

# Racine Megacycle Club

**Arne Moxness, KA9ZPY, Secretary**

**3345 Newman Road • Racine, WI 53406**

## Racine Megacycle Club Meeting June 10, 1991

Vice President Brian, WD9FRH, opened the meeting at 7:30 PM. Absent were President Dave, WB9USI, and Treasurer Dave, WD9ZIO. The May meeting minutes were approved as shown in the *Badger State Smoke Signals*.

Present at the meeting were 17 members and 2 speakers.

No treasurer's report was given.

## Old Business

Bob, W0WLN, asked what has happened to the leftover money from the March dinner. The club will look into the matter.

There was a lot of discussion about Field Day (June 22, 23). Appointed Field Day Chairman Jim, KB9CCY, will have a lot of work to get everything in good shape, and has indicated that he will need a lot of help in setting up the equipment. He would appreciate that everyone help him, since this is the

first year he has tried to organize a Field Day. The Field Day will start at the Red Cross at 7:00 a.m. (where the equipment is stored). The site is, as in earlier years, Armstrong Park on Hwy 31.

Bob, W0WLN, read a letter which explained the QCWA picnic August 18. Everyone is welcome to attend.

The regular meeting was adjourned at 8:00.

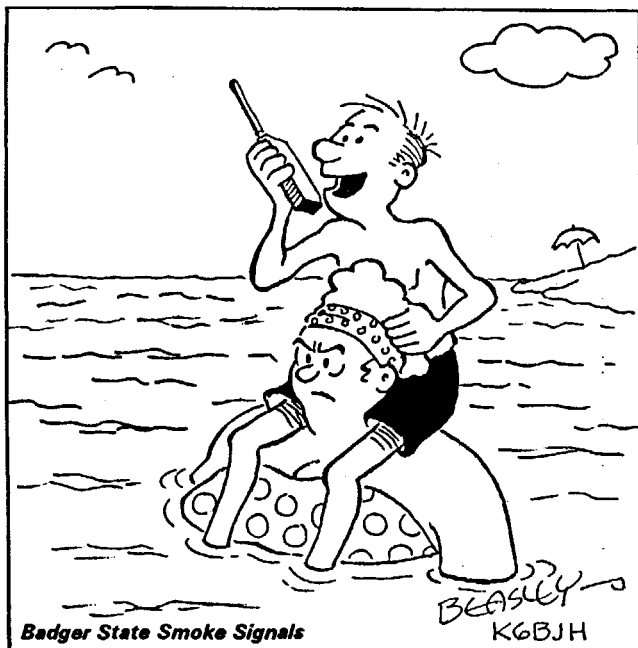
It was decided that the "Goody" box will be held until the next month's club meeting.

Vice President Brian, WD9FRH, then introduced the first speaker for the evening, Al Clausen, WD9DTJ, from the Racine Police Department, who held an informal meeting about his interesting experiences as a computer fraud investigator, and explained the penalties for copying programs, manuals and altering of programs, etc. He fielded some questions from the listeners.

Next speaker was Dave Weiss from Racine Cable, who talked about the large losses the cable company gets from illegal use of the "Black boxes", which many people use to avoid paying for the special channels like HBO, etc. The use of these boxes is considered theft, and may end with heavy fines and confinement if not discontinued before July 1, 1991.

The program ended about 9:30.

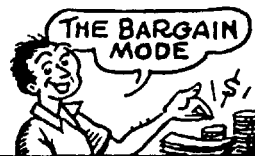
*Respectfully submitted:*  
Arne, KA9ZPY, Secretary



Badger State Smoke Signals

K6BJH

HEY AL, I'M FINALLY GETTING TO OPERATE MARITIME MOBILE!



**SSB**  
SELL SWAP BUY

**OUR WANT ADS GET RESULTS**

**WANTED:** 1990 International Callbook. Harry Westlund, K9EHJ, 720 Jefferson St., Baraboo, WI 53913, (608) 356-6836.

**FOR SALE:** Yaesu FT-790R MK II with FTS-7 encoder, \$500. Yaesu FTV-700 with 6M module, \$125. Icom IC-25A, \$175. Phelps Dodge 220 MHz 6-cavity mobile duplexer plus misc. repeater parts, \$350. I will trade any or all of the above toward a Yaesu FT-736R. Duane Grotophorst, KA9HKL, (608) 727-2109.

**THERE IS NO CHARGE** for ads in Sell, Swap, Buy. Non-commercial ads for this column may be sent to K9EN or K9ZZ. The addresses are on page 2. □

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# ARRL Petitions FCC for Access to 216 - 220 MHz

The American Radio Relay League has petitioned the Federal Communications Commission for a new spectrum allocation to help replace that at 220-222 MHz, which will be lost on August 27.

On June 4, the League filed with the FCC a Petition for Rule Making, seeking a secondary, non-interference allocation for the Amateur Radio Service at 216-220 MHz, to "provide reaccommodation for those present and future wideband data intercity links and other point-to-point fixed amateur stations which stand.... to be displaced from the 220-222 MHz band."

The idea of replacement spectrum had its genesis with Congressman Robert E. Wise, Jr., of West Virginia, Chairman of the House Government Information, Justice, and Agriculture Subcommittee. During the subcommittee's May 11, 1989 hearings on the FCC's 220 MHz decision (to give 220-222 MHz to the land mobile service), in calling attention to the fact that 216-220 MHz was underutilized, ARRL Executive Vice President David Sumner, K1ZZ, had testified that "radio amateurs would love to have access to [the 216-220 MHz band] in the rest of the country [where it is not used for waterway communications]. We'd make very good use of it."

Rep. Wise followed up by writing to then-FCC Chairman Dennis Patrick to suggest that the Commission consider some alternative scenarios for 216-220 MHz that would have provided some continued amateur access. The Commission declined to do so in the context of the Docket 87-14 proceeding, but agreed to give such a proposal consideration if submitted separately. In his reply to Rep. Wise, Chairman Patrick said:

"We did not consider in any depth amateur use of the 216-220 MHz band in this proceeding. It was not proposed by the Commission, nor was it addressed in the comments. However, ARRL did make a general comment in this regard in its petition for reconsideration. We have, therefore, in our Memorandum Opinion and Order, invited the amateur community to make a specific proposal. This would allow full public comment by all interested parties. It is possible that some limited secondary fixed use of this band may be made by the amateur service in reaccommodating the amateur fixed operations from the 220-222 MHz band. The Commission noted that while it is willing to consider this matter, potential impact on other users of this spectrum, particularly potential interference to TV broadcasting, will need to be addressed."

All other avenues for relief having been exhausted, on June 4 the League submitted the specific proposal invited by the Commission.

The 216-220 MHz band currently is occupied by the Maritime Mobile Service, and by some fixed and mobile assignments. In addition, part of the range (specifically, 218-218.5 MHz) also is under consideration for use by a new Interactive Video Data Service.

An engineering study by the Atlantic Research Corporation, commissioned by the League, found that the Amateur Service "could effectively operate in the 216-220 MHz band subject to appropriate frequency and distance separation constraints," even if usage of the band by commercial interests "grows substantially."

Another engineering study conducted by the staff of the ARRL Technical Department Laboratory found that interference to television channels 11 and 13 could be avoided, particularly if amateur operation were confined above 218 MHz in areas served by channel 13 television stations.

The League's petition notes that despite the apparent constraints that would be presented by sharing arrangements with existing and planned commercial operations, "there appears a significant opportunity for additional operation in segments of the band on certain frequencies in vast areas of the country."

The League's petition notes that the spectrum soon to be lost at 220-222 MHz was generally free of the repeater operations that dominate the band above 22 MHz. For that reason it had been planned, the petition says, that 220-222 MHz would be used for "high-speed, inter-city" packet radio, a system that is regarded as vital to amateurs' continued public service work in the coming years.

The League contends that the FCC's assumption that amateurs could merely move operations from 220-222 MHz "up the band" was incorrect; that such a move is not possible "because of the differences in technology used in the different segments."

The use of 222-225 MHz for voice repeater operation is expected to grow as new Technician class licensees occupy the band, further compounding the problem of finding space for the wideband channels necessary for high speed packet operation.

Most new high-speed modems for packet radio "were designed specifically for the amateur 220 MHz band," the petition says, and notes that while in 1987 30,000 amateur packet stations were thought to exist, the number today is thought to be more than 100,000.

In many cases, the inter-city packet networks envisioned for 216-220 MHz cannot be accommodated elsewhere - above or below those frequencies - because of band loading, sharing, or path length considerations.

The petition notes that the U.S. Department of Defense, on behalf of the National Communications System, filed reply comments on behalf of amateurs in Docket 87-14 (which reallocated 220-222 MHz to land mobile interests). NCS, in planning to use amateur communications itself, already had signed a memorandum of understanding with the League.

"The deprivation of these types of communication resources, which would be vital in times of emergency or crisis, could significantly hamper the ability of the NCS to carry out its responsibilities in the area of national security," the Secretary of Defense told the FCC at the time of Docket 87-14.

The ARRL Laboratory studied the potential television interference problem. TV channel 13 occupies 210-216 MHz. While the potential for interference would at first glance seem substantial, there are mitigating factors.

Namely, the amateur stations occupying the proposed allocation at 216-220 MHz would be point-to-point, using low power (the petition proposes 50 watts PEP) and highly directive antennas that could be cross-polarized to television receiving antennas.

The situation is comparable to the four decades of 6-meter amateurs' coexistence with the adjacent television channel 2; operation is more difficult in some places than in others, but on the whole the band is quite useful to the Amateur Service.

The study by Atlantic Research Corporation is a "Compatibility Assessment of the Amateur Service in the 216-220 MHz Band," that is, it estimates the potential for sharing of the segment between amateurs and the services mentioned earlier (the Maritime Mobile Service and the proposed IVDS).

Here is the conclusion of this highly-technical study:

"Given that band usage is currently very sparse, the amateur service could effectively operate in the 216-220 MHz band subject to appropriate frequency and distance separation constraints (i.e., as is the case with respect to amateur systems sharing with fixed and mobile services in the 220-225 MHz band.

"The constraints calculated in this study indicate that substantial spectrum resources would be available to the amateur service in the 216-220 MHz band throughout the U.S., even if usage of the band by other services grows substantially beyond the levels shown in Table 1." [Not shown here - ed.].

The study recommends the amateur service develop and maintain a data base of current assignments in other services in the 216-220 MHz range; and that proposed amateur stations in the range be planned according to the possible constraints resulting from sharing with other services.

The findings of both studies are incorporated into the League's petition, including "spectrum management and database administration."

"The League is will to coordinate, through continued database management, any amateur operation initiated in the band, and assist in resolving any interference problems which may arise. The League can be contacted by any non-amateur user of the band to register [an] interference complaint, which will be addressed immediately by contacting the amateur licensee involved.

"This way, there will be no administrative burden to any user, or to the Commission," the petition concludes.

- The ARRL Letter, June 13, 1991

## WARC-92 Slide Program Available

Looking for a program for your next club meeting? A slide show on the World Administrative Radio Conference coming next February is now available from ARRL HQ (225 Main St., Newington, CT 06111), with 55 35mm slides and cassette audio narration. The show also is available on VHS videotape, but the slide/tape version is recommended. The program focuses on issues at stake at the conference, on the draft U.S. proposals, and on how clubs and individuals can help.

- The ARRL Letter, 6/13/91



# Samuel F.B. Morse Honored

*Continued from page 8*

On April 24, the U.S. Senate adopted Senate Resolution 113 resolving "That the Senate recognizes, on the occasion of the 200th anniversary of the birth of Samuel F.B. Morse, the role of Samuel F.B. Morse in the revolutionary early development of electrical communications, and further recognizes Morse's momentous contributions to the economic, social, and industrial development of the United States."

ARRL Executive Vice President David Sumner, K1ZZ, offered remarks at the conclusion of the reenactment. "Radio amateurs are perhaps the largest group of people who share an important element of the legacy of Morse's telegraph: the Morse code," he said.

**A MILLION HAMS CAN'T BE WRONG:** Noting that about one million radio amateurs worldwide are skilled in Morse code communication,

Sumner said that it retains an important position in the world, even in these days of far more sophisticated systems.

"The Morse code helps to overcome language barriers," Sumner said. "It makes possible the use of simple equipment and reduced transmitter power. It can even be used in communicating between computers and human beings. Even better, once you know the code, it's fun to use it. For that reason, I am confident that when future generations mark the Morse anniversary as we are doing today, there will still be many radio amateurs who are skilled in Morse code."

Organizers of the reenactment were Frank Donovan, W3LPL; David Siddall, K3ZJ; Kenneth R. Dewhirst, K3IWE; Lawrence T. Fadner, W3GN; William O. Hider, N3RR; Peter L. Huber, K3ZR; Warren T. Bechtel, New Valley Corp.; and Boyd W. Humphrey, Western Union.

- *The ARRL Letter*, May 30, 1991

(Published by the American Radio Relay League,  
Newington, Connecticut 06111)

## Special Event Station Operations

### EAA Convention and Fly-In in Oshkosh

The Fox Cities Amateur Radio Club (Appleton, WI) will operate special event station W9ZL from the Experimental Aircraft Association's annual Convention and Fly-In at Wittman Field in Oshkosh, WI. This year, a special "Iron Annie" certificate will be issued to stations which contact W9ZL, which will be operating on board the Confederate Air Force Ju52 Junkers Tri-Motor airplane.

The station will operate July 26-29, primarily in the daylight hours in the general class portions of the 10, 15, 20 and 40 meter bands. VHF packet radio will also be used.

The club will issue special certificates for properly filled out QSL cards. All QSL cards must have contact numbers, and must have an SASE included. Send QSL cards for contacts made with W9ZL to Wayne Pennings, WD9-FLJ, 913 N. Mason St., Appleton, WI 54914.

### Manitowoc Maritime Week: The Cobia

The ManCoRad Radio Club of Manitowoc, WI, will operate special event station W9DK, aboard the WWII submarine Cobia, to celebrate Maritime Week. The station will be operated on August 17 and 18 from 1400Z until 0000Z both days. Suggested frequencies are 7.250, 14.250, 21.350, and 28.450 MHz. If you work the station and would like a certificate, please send your QSL and SASE to ManCoRad, P.O. Box 104, Manitowoc, WI 54221-0204. □

## ANNUAL EAU CLAIRE HAMFEST! and Computer Expo

*Sponsored by  
Eau Claire Amateur Radio Club*

**Saturday, July 27, 1991**

- Packet Meeting at 10:30 a.m. with live demo • \$3.00 at Door
- 7:00 a.m. to 2:00 p.m. • Drive in set-up with no steps
- 4-H Buildings on Fairfax Street - Behind Highland Mall

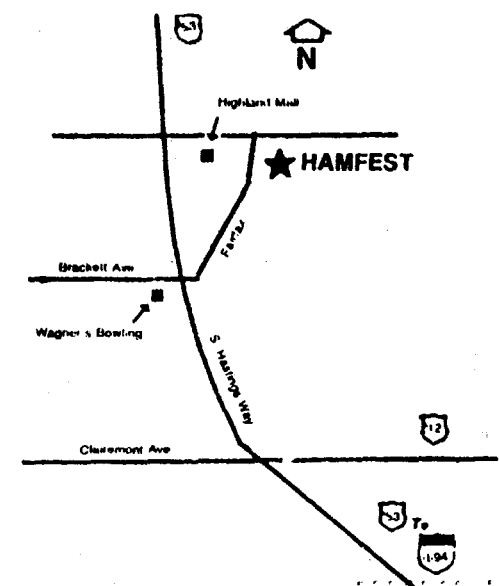
- 8' TABLES \$3.00 Dealers \$5.00
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## Minutes of the June meeting of the Central Wisconsin Radio Amateurs at UWSP

June 12, 1991

The meeting was called to order by President KA9LAQ at 7:30 p.m. Those attending were:

Ray Dix Jr.	KF9BG
Arthur R. Wysocki	N9BCA
Frank L. Guth	W9BCC
Robert E. Baird	W9NN
John Oravez	KB0FSB
Gene Kroll	KE9MA
Debbie Kroll	N9EIL
Adriana Dix	KB9DUR
Wendy Mangal	KA9WEQ
Joe Mangal	KA9TTU
Dave Olson	N9JQU
Cindy Omernik	N9JRG
Joe Omernik	N9CGV
Ron Howe	NJ9H
Brian Howe	KA9YJJ
Michael Eiden	WD9JID
Mary Eiden	KA9FAS
Mark Nemzoff	N9ICY
Mike Pagel	KA9LAQ
Paul Nelles	K9DB
Russ Fritz	KB9FVV/AG
Mike Smith	N9IAT
Michael Urban	KB9GXV
Frank B. Podach	N9JQR
Al Mallek	K9WVM
Dick Loveless	KB9DUC
Dean Holbrook	KB9FSP
Jim Benak	KA9ACE
Mary A. Olson	Visitor (KA9ACE)
Joe Larson	N9JW
Lori Jasper	KA9ZGD
Scott Jasper	NE9U

Secretary/Treasurer KF9BG provided a financial update and reviewed recent correspondence. The

minutes of the preceding meeting and the Treasurer's report were both approved.

N9BCA reviewed the schedule for the 14th Annual SWAPFEST coming up on Sunday, June 16. Art asked for volunteers to help throughout the event, with special emphasis on the opening and closing hours to assist vendors with setup and takedown of their displays.

Based on a show of hands, Field Day will be lightly attended this year. KA9LAQ announced that a modest amount of the club treasury would be used to purchase brats, hamburgers, buns, condiments and chips to promote a family oriented evening on Saturday, June 22. Members were asked to bring their own beverages and a dish to pass. K9WVM volunteered to oversee delivery of radios, KF9BG accepted responsibility for moving the generator and trailer to the operating site. KA9LAQ offered to obtain and set up the operating tent. Now all we need is operators!!!! The site is two lots west of the W9NN QTH just east of Galecke Park on the Wisconsin River.

KA9TTU reported that the Special Olympics volunteer orientation meetings would be held on Tuesday and Wednesday, June 25 and 26 at 7 PM in the UWSP Allen Center. These meetings are now an annual event to update veterans and newcomers alike, so previous participation does not exempt you from attending. The two meetings are identical, however, and volunteers need attend only one session.

K9DB informed the group that site security would be stepped up at the 1991 games in an effort to keep unauthorized personnel off of playing fields. Our Amateur Radio shirts will serve as gate passes.

Paul also informed the group that the 1991 Summer Games are dedicated to the memory of Warren Choudoir, who passed away recently. Mr. Choudoir was an extraordinary local community leader who had been a key figure in the management and administration of the Summer Games at Stevens Point for many years.

KA9LAQ asked for feedback on the conversion from a locally produced club bulletin to the *Badger State Smoke Signals*. Following a short discussion about the conversion's impact on the identity of the group, those attending voted to continue the relationship with the BSSS.

KA9LAQ posed an idea for consideration at future meetings. Since significant numbers of licensed Hams in Portage County are Novices/Technicians who have never been on the air, we might wish to consider setting up a schedule of volunteers to staff the Club Station for one Saturday afternoon

each month. Once established, the schedule could be published through local media and a mailing could be aimed at inactive Hams in the area. The club station would get a workout, the club would enjoy some publicity, and we might bring some inactive operators into the fold by providing the equipment AND the coaching they might be lacking at present.

NE9U announced the Annual Foxhunt will be held on Sunday, August 11. We will use a simplex frequency on 2 Meters for the hunt. All participants in the hunt must meet at 2 PM on the 11th in the parking lot across the street from the UWSP Club Station (talk-in on 146.670). The specific frequency and related rules will be distributed to all participants at that time. Following the Hunt, we will gather for a cookout at the W9NN QTH. Bring your own food and beverages. We hope to have several charcoal grills there for all to use.

KA9LAQ has moved the vandalized Wildlife RDF antenna to the Club Station. NE9U has volunteered to chair the committee entrusted with either repairing or cloning the damaged antenna. Committee members are: N9IAT, N9JQU, N9KNE, KF9BG and K9WVM. The target date for completion is the September meeting.

KB9DUC is a teacher at Jackson Elementary School, where he has secured permission to set up an Amateur Radio Station. Anyone with suggestions for equipment and/or techniques for incorporating the station into regular classroom activities is asked to contact Dick.

Welcomes were extended to visitors KB9FSP, KB9GXV and KB0FSB. Your continuing participation is encouraged!!!!

The meeting ended at 8:19 p.m.

Our scheduled program was to be Sandra Smollen, the Portage County Emergency Government Director. Ms. Smollen was to discuss our role in Portage County's Emergency Government operations, and we hope that she will be able to attend our July meeting.

We will meet, again, in Room D217 of the UWSP Science Building on Wednesday, July 10 at 7:30 PM. Bring a friend!!

## Editor's Soapbox

Thank you to all who helped with the SWAPFEST on June 16th. Attendance was up from 1990, and we had enough volunteers to make operations go smoothly.

According to Joe Larson, N9JW, the local VE team processed 51 test applicants! From those 51 applicants came 22 new Technicians, 5 upgrades to General class, 3 to Advanced and one new Novice!

Local successes included John Kinney, N9KNE, who upgraded to Advanced. Adriana Dix (KB9DUR), Mike Urban (KB9GXV) and John Kalina (KA9DJA) all upgraded to Technician, and Jim Tuszka joined the ranks of Amateur Radio by becoming a Technician. Congratulations to all of you!

I'd also like to point out that the attendance at the June meeting set an all-time record for participation. If you're not attending, why not drop by to see what you've been missing?

Watts Snoo is continued on page 16

## QuickKit™ G5RV &amp; All-Band Loop Kits

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# Boy Scouts Enjoy Circus Heritage Days in Baraboo



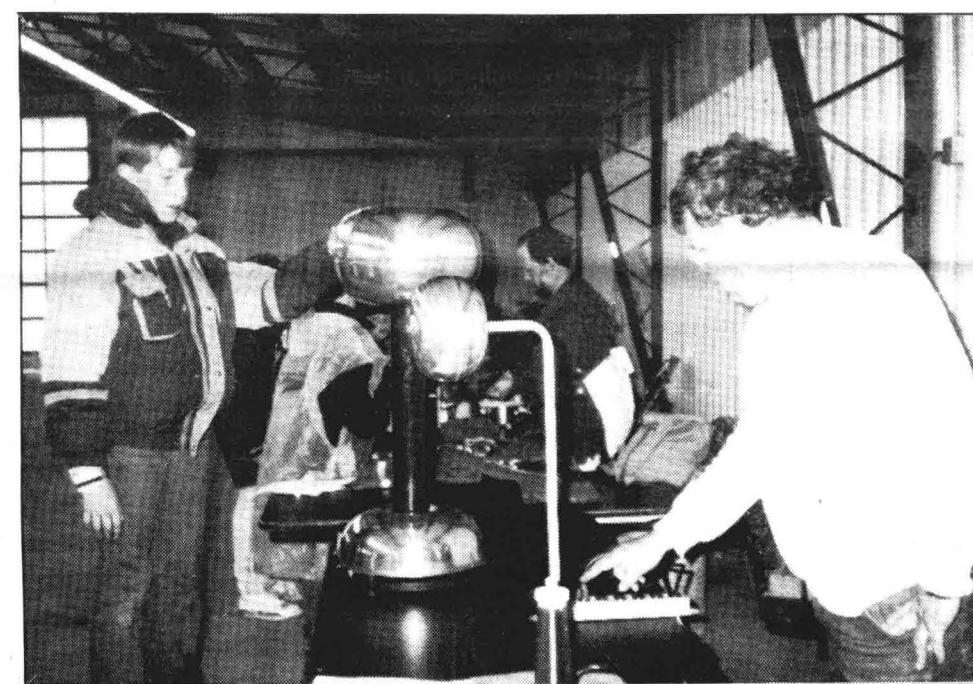
When hundreds of Boy Scouts converged on the Sauk County Fairgrounds in Baraboo for Circus Heritage Days in May, they took advantage of the Merit Badge Midway, where they had numerous opportunities to earn points toward merit badges. Members of the Yellow Thunder Amateur Radio Club provided



an operating station. In the photo at left above, Jim Decker, WB9UQT, Baraboo (wearing cap), demonstrates two-meter FM. In the photo at right, Bill Klinkner, N9KXX, Sauk City (wearing dark glasses), at the keyboard, shows how packet radio works.



In the photo above, at left, is Baraboo radio amateur Don Evenson, K9JYX. Don is a volunteer firefighter with the Baraboo Fire Department. He is explaining the equipment firemen use to enter burning structures to rescue people who are trapped or overcome by smoke during a fire. In the photo at



right, D.C. Cox, at right, of rural Baraboo, uses a "mini-Tesla coil" to demonstrate the effects of high voltage. The rainy day, which made the experiment less effective than usual, but the demo still added a lot of spark to the Midway! Cox manufactures these and other like spectacular devices. □

## Madison Volunteer Scout Leader, Radio Amateur, Gets Scouting's Highest Honor

John "Doc" Schroeder, K9YXW, of Madison, WI, pictured at right, was awarded the Silver Beaver Award - the highest award that can be given to an adult Scouter volunteer by a Boy Scout Council - at the annual dinner-recognition banquet on May 17, 1991, in Wheaton, Illinois.

Doc has been involved with Scouting, as well as with many other volunteer activities, for many years by participating at the Council's long-term summer camp at Oxford, Wisconsin.

Scouting volunteer who has given distinguished service to youth. In fact, in 60 years, only 191 Silver Beaver Awards have been given. Doc is one of five persons so selected this year from among 3,600 registered adult Scouters in the DuPage Area Council.

Congratulations to Doc on this prestigious award!

- Bill Hollister, KA9ZHM  
1162 Michelle Lane  
Lombard, Illinois 60148



The Silver Beaver Award is given only to a



# Yellow Thunder Amateur Radio Club

Duane Grotophorst, KA9HKL, Secretary

K9ODK  
WB9FDZ

E5767 South Line Road • Loganville, WI 53943



## Minutes of the June, 1991 YTARC Meeting

The meeting was called to order by Art Kleefisch, W9WSS, at 7:52 p.m. The following members and guests were present:

L.J. Hemmer, WB9TFJ	Baraboo
Rohbert Hemmer, N9LKX	Baraboo
Steve Schwoegler, WB9RNL	Wisconsin Dells
Harold Reif, KA9YQP	Baraboo
Bill Klinkner, N9KXX	Sauk City
Steven Steele, KB9ESD	Portage
Dennis Sweeney & Kids	Portage
Harry Mayland, K9FFT	Baraboo
Joey Sweeney, KB9ERR	Portage
Duane Grotophorst, KA9HKL	Loganville
Jim Decker, WB9UQT	Baraboo
Art Kleefisch, W9WSS	Baraboo

Upcoming meeting dates are Tuesday, July 16 (room 14) and Wednesday, August 14 (room 14).

The minutes of the May meeting were approved as published. The treasurer's report was accepted.

Jim, WB9UQT, gave a report on the Freedom Days Parade operation, with the following operators

assisting: L.J. Hemmer, WB9TFJ; Sandy Hemmer, KA9VFW; Art Kleefisch, W9WSS; Bill Klinkner, N9KXX; Fred Becker, W9KKM; Jim Romelfanger, K9ZZ; Jim Decker, WB9UQT; and Duane Grotophorst, KA9HKL.

L.J. gave a rundown of his new simplex auto-patch setup that he now has operating.

The meeting then turned to Field Day planning, with a good amount of equipment and operators available; it should be a good-sized crew for this year's operation. The Field Day location again is Owen Park in Columbia County.

I gave a report on our most recent classes, noting that one student has passed his Novice, and several others are ready for testing.

I then gave an update on the VE test session that we will run. If you would like more information, call me at (608) 727-2109, or catch me at Field Day.

Buck Nite winner was Gary Pratt, WB9ECO, who was not present. Next month, the prize will be \$3.00.

Meeting adjourned at 9:15 p.m.

Duane Grotophorst,  
Secretary

## Watts Snoo

Continued from page 14

Club elections will occur at our September meeting, so give some thought to running for office or supporting candidates of your choice. All elected posts are open. Membership renewals are also due at the end of September, so keep a few dollars aside to cover your membership and subscription.

Speaking of dollars, I have been informed that our general raffle netted us exactly \$15. Since over half of all raffle tickets sold were purchased by club members, it makes little sense to continue it. How

many tickets did YOU buy? I have casually inquired and found over \$300 in member-purchased tickets, and I'm sure that amount is a conservative assessment. If that money had simply been deposited in the treasury, we would have been \$300 ahead and avoided the frustration, time and effort associated with prize selection, ticket design and printing, distribution, sales and collection of revenue. Face it folks, we could have made more by securing pledges for KA9LAQ to shave his beard or for K9WVM to swallow live goldfish!

Think about it. We're got another SWAPFEST in 12 months. What are our legitimate alternatives to the traditional raffle for fundraising??

73 to all, de KA9LAQ

## Sikes Pledges Strict Enforcement to Senate Oversight Committee

In a May 22 statement to the Senate Communications Subcommittee in support of the FCC reauthorization bill, (FCC) Chairman Alfred E. Sikes renewed his pledge to follow a policy of strict enforcement. He offered several examples, four of which are of particular interest:

- **"Unlicensed Operations.** A nationwide effort - directed at determining the license status of stations in the land mobile services - was conducted in the summer of 1990. Over 1,600 inspections were conducted during this Field Operations Bureau survey. The effort revealed that 19 percent of land mobile stations were unlicensed. In December, 1990, an additional effort focusing on unlicensed shortwave operations was conducted. Field offices inspected 144 unlicensed shortwave stations, resulting in a total of \$147,000 in fines.

"Unlicensed operations were observed on the 25 and 28 MHz frequencies allocated for business and Government use. Because of the high level of unlicensed operation represented in these surveys, we plan a continued effort to identify, locate, and stop stations operating without authority."

- **"Cable Signal Leakage.** On-site inspections have been conducted of 50 cable television systems to date - to ensure that signals potentially harmful to civil aviation are not "leaked." As a result of this effort, channels on a number of cable TV systems were actually closed down until operators took steps to upgrade their facilities to eliminate signal leakage.

- **Tower Inspections.** A nationwide effort aimed at ensuring full compliance with FCC radio tower lighting rules has also begun. To date, more than \$350,000 in fines has been levied. I believe that this effort is critical to meeting the highest priority set forth in the Communications Act - namely, ensuring safety of life.

- **Computers.** Last year, \$200,000 in fines were levied against manufacturers and sellers of computers which had not received FCC approval and were emitting harmful interference."

Sikes also noted that the FCC is conducting a field inspection of 800 MHz land mobile radio systems, to ensure that systems for which licenses have been issued have actually been built in the specified time periods. The results are to be available shortly.

- The ARRL Letter, 6/13/91

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# Taylor County Area Amateur Radio Club

**Rolland Walty, W9LEE, Secretary**

**W4117 Highway 102 • Westboro, WI 54490**

**NEXT MEETING:** July 11 at 7 p.m. in the Taylor County Courthouse Annex, 2nd and Ogden, Medford, WI.

## Minutes of June 13 Meeting

Meeting was called to order at 7:15 p.m. by President N9GEN. Attending were W9QHI, WD9-

ASX, KB9BLV, N9GHZ, WD9FWP, N9GEN, N9IDW, and W9LEE.

Minutes of May meeting were read and approved. Treasurer's report indicating a healthy balance was read and approved.

Motion made and seconded for the club to pay \$2.00 toward each club subscription to *Badger State Smoke Signals*. Motion carried.

Field Day plans for the park in Gilman were discussed and approved. W9LEE agreed to furnish the generator.

N9GHZ reported that the digipeater has been moved back to the Midway Telephone office in Medford and is working well, except for an interference problem believed to be caused by a scanner in the vicinity.

The club voted to thank N9FSZ and KA9UXN for their services in providing communication for last month's bike race.

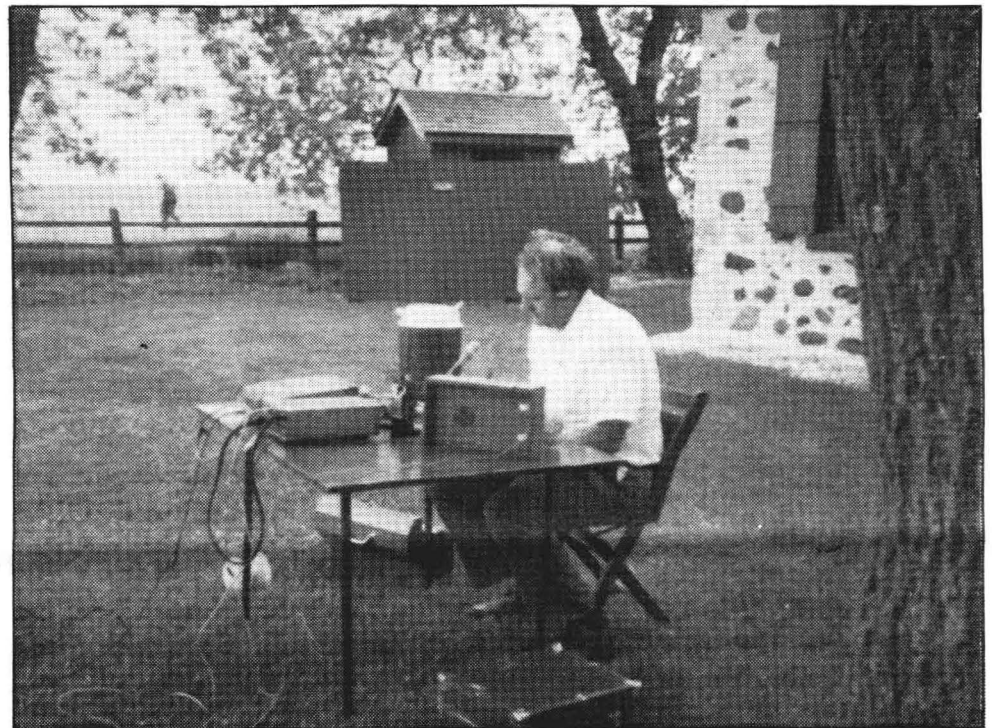
There being no other business, the meeting adjourned at 8:26 p.m.

*Rolland Walty, W9LEE  
Secretary*

## Special Event Station Honors Birthplace of Flag Day

Special event station WJ9O was on the air on June 9, 1991, to help celebrate Flag Day at the day's birthplace, Stony Hill School, 12 miles north of Cedarburg on Route I. Operating the station, shown in the photo at right, was Mike Mathies. An historical marker at the school reads: "Here at Stony Hill School, Bernard J. Cigrand, 19 year old teacher and his students held the first recognized observance of 'Flag Birth Day' on June 14, 1885, with a flag ten inches high, carrying 38 stars, standing in a bottle on the teacher's desk. After thirty-one years of crusading by Dr. Cigrand, President Woodrow Wilson on June 14, 1916, proclaimed the national observance of Flag Day." The special event station aroused considerable interest.

- Story and photo by Fred Linn, W9NZF



## Packet Citation Mess Escalates Again

One of the packet BBS operators cited last January by FCC Norfolk, VA EIC J. Jerry Freeman (W4JJ) has hired counsel and says he will accept nothing less than full dismissal of all charges. Richard White, KA3T, has retained attorney John McVeigh, KD4VS, to represent him and to place his demand for a full public retraction of the charges against him.

According to attorney McVeigh, the FCC appears to be trying to squirm free of the situation created by EIC Freeman by issuing those involved letters saying no further action will be taken in the matter because the packet operators have taken the necessary action to assure this problem will not occur again. He says that this action still leaves a black mark on his client's otherwise spotless record, and says that White will not tolerate this.

"The Commission needs to retract the Notice of Violation against Mr. White," McVeigh told news publisher Fred Maia, W5YI, in a recent telephone interview. "We have admitted no facts and the Commission has not established a violation in the first place. Mr. White had a perfectly clean record before this Notice of Violation. The FCC needs to restore the status quo. That is the only thing that will satisfy me and my client."

- Excerpted from *Westlink Report*, 6/10/91

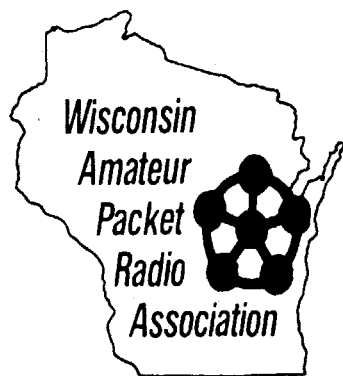
## Saddam's Legacy

Smoke from the many burning oil wells, aftermath of Iraqi occupation, almost totally obscures this scene of Kuwait, photographed by the crew of space shuttle mission STS-37. Oil wells to the north of the Bay of Kuwait and just to the south of Kuwait City, on the south shore, can be seen burning out of control. The scene was photographed with a 70mm handheld camera through windows on Atlantis' aft flight deck. This mission also carried the most recent Shuttle Amateur Radio Experiment (SAREX), with an all-Radio Amateur crew.

- NASA photo







# THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPR)

c/o Carl Schumacher, N9BYS

7740 Evergreen Terrace, Burlington, WI 53106

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

WAPR Meeting June 16, 1991 @ UW Stevens Point Campus. (Minutes)

At 10:10 a.m. the meeting was called to order by the Chairman, Rev. Bill Jablonske, W9NNS.

The minutes from the previous meeting of January 12, 1991 were read by Rev. Bill, W9NNS. A motion was made by N9BKJ, Bob, to accept the minutes as read and was seconded and unanimously carried.

The Treasurer's Report was read by N9BYS, Carl. June's expenditures were \$387.08 leaving a balance of \$126.36. A motion was made by WB9ZRE, Steve, to accept the Treasurer's Report and was seconded by NC9G, Art, and was unanimously carried.

W9LZQ, Kent, gave a brief report for the greater La Crosse (RIVLAN) area. Items mentioned included 9600 baud plans @ 450 Mhz with Rochester MN, Fund raising, the 220 Mhz link and the new 145.57 Mhz LAN frequency.

N9BKJ, Bob, gave a brief report for the Waupaca area. Included were comments about the six meter link and its success to date. He mentioned that the 440 frequency will be operational on the 16th or 17th of June. He had great praise for the TTL matrix used to connect between the computer and TNC nodes.

KA9EOK, Bob, Park Falls reported that he is quite happy with the situation in his area with no problems reported.

W9NNS, Rev Bill, commented about the path from La Crosse to Chippewa Falls to Park Falls. He mentioned that the Exelund (Meteor Hill) site is running 140 watts and he is planning to place a beam toward Waupaca from Antigo.

WB9TYT, Dan, passed out information from NEDA and copies of the Wisconsin Bandplan. He gave some personal views on the MFJ 2400 baud adapter board. It works great with circuits as they now exist and nothing special is required. Just plug and play. He mentioned that the new 220 Mhz frequencies are forthcoming as August 27th is fast approaching. He also indicated that he hoped there would be some interest generated in UHF LAN frequencies as two meters is getting crowded. One UHF LAN is being planned for the Madison area.

## Election of Officers

The following nominations were made for the indicated offices.....

Chairman - W9NNS, Rev Bill Jablonske - by WB9TYT, Dan

Treasurer - W9ZBD, Bill Schroeder - by WB9TYT, Dan & seconded by W9IHW

Vice Chairman - KA9EOK, Bob Martin -

Secretary - WB9ZRE, Steve Loeffler -

W9LZQ, Kent, made a motion to close nominations and was seconded and carried.

Since there was only one nominee for each office a voice ballot was taken and all were unanimously voted into office.

At this time a recommendation was made to expand the board of directors from 3 to 5 members but it was pointed out that the membership had to be notified in advance of an upcoming meeting in which any proposed changes to the Associations By-Laws was to be presented and voted upon.

The following nominations were made for the board of directors.....

WB9TYT, Dan Bolander

K9MLD, Joel Eschmann

W9LZQ, Kent Helman (later withdrawn by himself)

N9BKJ, Bob Krueger

KD9FC, Tom Young

K9EN, Ken, made a motion to close nominations and was seconded by N9BYS, Carl, and was carried.

The Secretary made up ballots and then a secret ballot has taken.

The results are as follows:

WB9TYT, Dan Bolander, Milwaukee

K9MLD, Joel Eschmann, Hartford

N9BKJ, Bob Krueger, Waupaca

## Open Forum Discussion

The membership was reminded that membership begins in July and ends in June.

Information, if you have been receiving Badger State Smoke Signals and it stops unexpectedly, contact Ken Ebner, K9EN via mail. If you have never received Badger State Smoke Signals after joining or renewing WAPR membership, then contact the Treasurer.

A thought about having a monthly HF voice forum on 75 meters was thrown up for discussion but the point of Technicians being unable to join in on 75 meters was raised. Most of those present at the meeting preferred the packet forum anyway.

W9LZQ, Kent, informed the group about an upcoming simulated oil spill on the Mississippi River in his area (La Crosse). The governors from both Minnesota and Wisconsin are participating. The dates for this exercise are going to be 21-22 July 1991 and it is requested that no bulletins be forwarded to the La Crosse area. Personal traffic will not be affected.

KB9OK, Rudy, presented signed petitions requesting to have the designation of 145.03 Mhz changed to read as follows:

145.03 Mhz - KYBD to KYBD, (Full Service BBS Free)

This subject will be kept open pending research into the national bandplan and surrounding states to find out what is acceptable. A motion was made to do the above, was seconded and carried.

At 12:13 p.m. a motion was made by Rev. Bill to adjourn, was seconded and carried.

Respectfully submitted

Carl Schumacher, N9BYS

Treasurer - WAPR & Acting Secretary

## TYT Routing Changes.....

I have made a few changes to my BBS here to facilitate the movement of traffic in/out of my BBS... At this time, if you connect to either WB9TYT, WB9TYT-3, or #DAN, you will be coming in on the 220 Port which is used as a BBS Only port at the moment.. I will open it up to all users for a trial period & see if the 2400 baud 220 route will be able to handle the extra traffic... What this means is that you should be able to send a "Connect Request" at any node where you see WB9TYT listed in the nodes list & you will be automatically routed in via the 223.565 Mhz, 2400 baud port.. This might cause a problem for Jerry, KC9BK, & myself with our normal forwarding, but it should take a load off of the 145.690 LAN... As usual, looking for comments & suggestions for this change....

Dan - WB9TYT

## MFJ Clock "BUG".....

Many users of the MFJ-1278 may already know this but I discovered it by accident and thought I should pass it on. To wit:

The clock function (DAYTIME) is functional \*only\* when in the packet mode. This means that when you shift to another function, such as AMTOR (which does not recognize the DAYTIME command), the clock stops running. It holds the last value in memory and when you return to packet function the clock continues where it left off. This can produce great errors in timing unless you reset the clock when you return.

I didn't find this explained in the 1278 manual, although I didn't look too hard. I was puzzled by unexplained daytime errors of large magnitude until I hit upon this little bug ('feature?').

Just thought you'd like to know.

W1UKZ

## KAM Hum Problem Solved.....

I had hum on my VHF radio when using the Kantronics KAM. I found the hum was due to a ground loop problem with my computer. Disconnecting the ground wire from pin number 7 on the RS232 cured the hum problem.

Jim - N4JA

The item on connection to MIR spacecraft in last months BSSS was inadvertently shortened when setting up the page. We are repeating the article in it entirety.

## Connecting to MIR.....

Several packeteers have asked for information with regards to connecting to the MIR spacecraft. Their questions range from power output required, to frequency, to when will the spacecraft be overhead.

Lets start with a few basics and go from there. MIR makes one complete orbit of the Earth approximately every 93 minutes and it's average altitude is approximately 360 Km. Mir's orbit carries it above local horizon about 7 consecutive orbits each day.

For the packet operator, this translates into an effective access window of 5 minutes on two or three of those passes, with shorter access windows on the balance of the passes. Maximum horizon to horizon time on any one pass is about 10 minutes. (MIR is moving at more than 5 KM per second!)

The best way to know when MIR is overhead is to use a satellite tracking program, obtaining the satellite plotting values - Keplarian data - from the weekly bulletins circulated on packet thru the packet BBS network. An older method is to monitor the frequency MIR is using, when a signal is heard, expect the next pass approximately 93 minutes later. (The first pass will allow less than 2 minutes access time, with the subsequent pass longer.)

As for MIR's frequency, thats 145.55 simplex. The callsign in use is U5MIR, and, yes, there is a mailbox - U5MIR-1. Generally, you will hear the mailbox, however, MIR is occasionally active for keyboard to keyboard contacts.

If you are on 2 meter packet and your rig can operate on 145.55, you have everything needed to connect to MIR! In order to optimize your capability to connect to MIR, lets concentrate on antenna, power and procedures. Obviously, a stacked mega-element, AZ-EL antenna auto-tracking system running 2000 watts output will put you in great shape for connecting to MIR, however, reality will probably put you into the omni antenna running under 50 watts output category. Actually, the 'standard' station consists of a omni antenna running 10 watts output.

When MIR rises above the horizon, it becomes 'line-of-sight' and can be worked with as little as 1 watt. The 'powers-that-be' have requested a power maximum of 50 watts in order to allow all stations a chance to connect. (If YOU run more than 50 watts, make a sign with 'LID' printed in big letters and hang it around your neck for all to see!).

Antennas are a different matter, anything goes.

The best antenna is a high gain beam, however, a beam only works well in a specific direc-

tion. In order to work MIR with a beam, you will have to aim your it at MIR as the spacecraft passes across the sky, a very difficult prospect if you do not have a tracking program and AZ-EL rotor system. A good compromise is a high gain omni antenna. While the gain is several Dbs less than a beam, an omni does not have to be pointed at MIR.

Now for a few hints in connecting to U5MIR. The Mir packet station is set up to handle only one connect at a time. If U5MIR or U5MIR-1 is connected to a station, do not attempt to connect until the station disconnects. Set your TNC parameters so that you are able to display all packets received by your radio and see when you should attempt to connect. (If you try to connect when another station is working MIR, you will slow down that station's access - and possibly eliminating any time for you to connect before the satellite sets below your horizon!). If you connect to U5MIR-1, keep your message very short (Meaning under 10 words, including your name and callsign). The BBS is a limited size. Allow others the opportunity to drop in a 'Hello'. Here is an example of a message to MIR:

ST U5MIR

Hello

VY 73 & PLS QSL - Joe WA9XYZ Anytown, WI  
/ex

The best time to connect to MIR is late night and early morning hours, when most hams are in bed. As MIR orbits the Earth, it 'gains' an hour or so each day meaning that you will have one long stretch of 'wee' hours access time each month.

The last hint to successfully working MIR is not to get frustrated if your first attempts fail. Consider the number of Amateurs that might be attempting to connect to MIR. As W5LFL discovered when he first operated aboard the Space Shuttle, several stations transmitting at the same time on the same frequency results in no usable signal received at the spacecraft. Keep plugging away at it, and your efforts could result in a unique QSL card confirming your contact with a cosmonaut in space!

Steve - WB9ZRE

## WAPR/WAR

## WISCONSIN PACKET BANDPLAN 5/22/91

\*\*\*\*\*  
50.740 Mhz Waupaca to Antigo & West Link  
51.120 / 51.620, 51.140 / 51.640, 51.160 / 51.660,  
51.180 / 51.680  
51.620 Mhz Repeater or Simplex  
51.640 Mhz Repeater or Simplex  
51.660 Mhz Repeater or Simplex  
51.680 Mhz Repeater or Simplex  
51.700 Mhz National Packet Simplex  
\*\*\*\*\*  
144.910 Mhz. DX Cluster Node Linking Frequency  
144.930 Mhz. Oneida & Vilas County LAN  
144.950 Mhz. Amsat & Satellite operations  
144.970 Mhz. Markesan & Ripon LAN  
144.990 Mhz. Sheboygan & Manitowoc Counties LAN  
145.010 Mhz. Mail Forwarding Backbone and Long Haul. Nodes only on this Frequency  
145.030 Mhz. KEYBOARD COMMUNICATIONS AND EXPERIMENTATION (BBS FREE).  
This frequency will be designated real time communications.  
NO BBS's on this frequency.

145.050 Mhz. Green Bay and NE Wis LAN  
145.070 Mhz. South Central Wisconsin LAN  
145.090 Mhz. Lacrosse/Riverland LAN  
Milwaukee Area South LAN  
145.510 Mhz. Protected in Wisconsin  
145.550 Mhz. Amsat & Satellite operations  
145.610 Mhz. ARES High Speed Linking Frequency statewide to interconnect ARES LAN Frequencies.  
145.630 Mhz. Stevens Point, Wausau, & Central Wisconsin LAN  
145.650 Mhz. Waupaca and Appleton area LAN  
145.670 Mhz. Statewide TCP/IP Frequency  
145.690 Mhz. Milwaukee Area North LAN  
Far North/Northwest Wis LAN  
\*\*\*\*\*  
221.315 Link between Slinger, Markesan, & Lodi  
221.340 Link between N. Prairie to Burlington & Illinois  
223.400 Protected in Southern Wisconsin  
223.420 DX Cluster user LAN  
223.440 DX Cluster user LAN  
223.460 DX Cluster user LAN  
223.480 DX Cluster user LAN  
223.560 BBS Linking Frequency in LaCrosse  
223.565 BBS Linking frequency in SE WI.  
\*\*\*\*\*  
430.050 DX Cluster Linking Frequency  
430.950 9600 Baud link From LaCrosse to Rochester, MN  
446.100 High Speed Linking Frequency in Eastern WI.  
446.125 Ixonia ARES LAN  
446.175 Racine & Kenosha County ARES LAN  
446.225 Waukesha County ARES LAN  
446.275 Milwaukee County ARES LAN  
446.375 Ozaukee County ARES LAN  
Madison area LAN  
446.425 Washington County ARES LAN  
446.675 Markesan to Waupaca Link  
\*\*\*\*\*  
902 - 928 Mhz Consult with WAPR  
\*\*\*\*\*  
1240 - 1300 Mhz Consult with WAPR  
\*\*\*\*\*  
Please consult with WAPR with your plans & we will assist you in locating a frequency that will fit your needs & not interfere with other users. -- Dan, WB9TYT @ WB9TYT

## TEST POINT

(continued from page 3)

If you are interested in any of these, please save this listing as we may not always have space available to list them. Thanks to "Ground Wave" for the above information.

If you plan on taking any of the exams, it is suggested that you contact the sponsoring organization as the date nears to find if there have been any changes in dates or locations.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN at the address shown on page 2.



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